

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: P249321

Luminaire Tested: **LD8B120D010 ER8B120835 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249321  
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: LD8B120D010 ER8B120835 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3500 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12222.0 lumens  
Efficiency: N/A  
Efficacy: 103.3 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

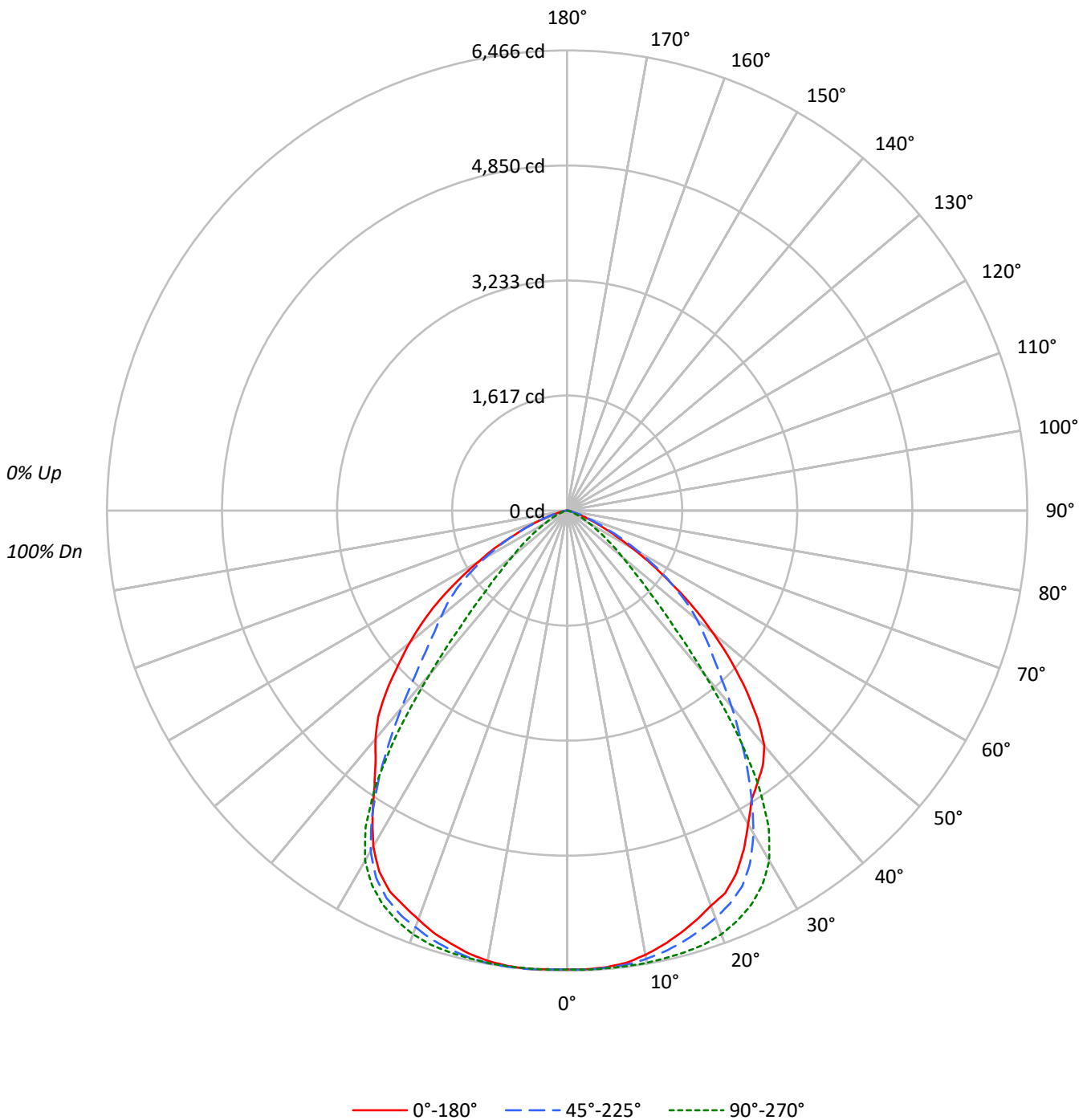
Input Watts (W): 118.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	198851	198851	198851
5°	199289	199824	200041
10°	198449	202025	201158
15°	196250	204981	201115
20°	193893	207862	200593
25°	191375	208102	200800
30°	181053	202250	193992
35°	175648	175776	177602
40°	173470	120943	168596
45°	154573	72605	156683
50°	128524	48323	138488
55°	96394	33311	117420
60°	65324	22202	88593
65°	39401	14396	60867
70°	21846	7808	37443
75°	9901	3300	19384
80°	8595	3694	13514
85°	9800	4883	13480



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	615.4	5.0
10°-20°	1787.3	14.6
20°-30°	2712.8	22.2
30°-40°	2849.2	23.3
40°-50°	2136.1	17.5
50°-60°	1370.6	11.2
60°-70°	586.3	4.8
70°-80°	138.5	1.1
80°-90°	25.8	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°	5115.5	41.9
0°-40°	7964.7	65.2
0°-60°	11471.4	93.9
0°-90°	12222.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12222.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	6449	6449	6449	6449	6449	
5°	6438	6449	6456	6466	6462	612
15°	6147	6276	6421	6379	6300	1734
25°	5625	5822	6116	6006	5902	2570
35°	4666	4406	4669	4614	4718	2928
45°	3544	2897	1665	2814	3593	2714
55°	1793	1793	620	1869	2184	1626
65°	540	637	197	820	834	576
75°	83	97	28	166	163	121
85°	28	17	14	28	38	29
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°	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6
2.5°	6452.0	6459.0	6455.5	6455.5	6452.0	6455.5	6455.5	6462.5	6462.5	6455.5	6452.0
5°	6438.2	6445.1	6445.1	6438.2	6438.2	6455.5	6445.1	6452.0	6452.0	6448.6	6448.6
7.5°	6407.1	6407.1	6420.9	6410.5	6410.5	6420.9	6417.4	6424.3	6431.3	6434.8	6434.8
10°	6337.8	6344.7	6348.2	6348.2	6351.7	6362.0	6369.0	6382.8	6389.7	6396.6	6400.1
12.5°	6251.3	6261.6	6265.1	6261.6	6272.1	6285.9	6303.2	6320.5	6330.9	6344.7	6355.1
15°	6147.4	6147.4	6154.3	6164.8	6171.7	6192.4	6209.7	6230.5	6258.2	6275.5	6292.8
17.5°	6033.2	6040.2	6050.5	6050.5	6064.4	6098.9	6109.4	6140.5	6171.7	6189.0	6223.6
20°	5908.6	5915.5	5925.9	5932.9	5950.1	5977.8	5998.6	6026.3	6060.9	6092.1	6126.6
22.5°	5811.7	5797.9	5804.7	5811.7	5829.0	5853.2	5877.5	5912.0	5946.7	5977.8	6012.5
25°	5624.7	5628.2	5638.6	5645.5	5666.3	5687.1	5714.8	5756.3	5787.4	5822.1	5860.1
27.5°	5372.1	5375.6	5392.8	5392.8	5410.1	5444.8	5462.0	5496.7	5538.3	5572.8	5617.9
30°	5084.8	5091.7	5091.7	5105.6	5115.9	5133.3	5150.5	5185.2	5205.9	5237.1	5299.4
32.5°	4821.8	4828.6	4825.1	4821.8	4811.3	4807.9	4804.4	4811.3	4818.3	4828.6	4852.8
35°	4666.0	4648.6	4634.8	4610.6	4582.9	4548.3	4517.1	4475.6	4437.5	4406.3	4371.8
37.5°	4517.1	4513.6	4492.9	4458.2	4402.9	4340.6	4267.9	4177.9	4087.9	3991.0	3897.6
40°	4309.4	4299.0	4281.7	4233.3	4171.0	4094.8	3997.9	3887.1	3741.7	3592.9	3440.6
42.5°	3956.3	3959.8	3939.1	3901.0	3842.2	3769.4	3669.1	3547.9	3392.2	3215.6	3018.3
45°	3544.5	3544.5	3537.5	3506.4	3464.9	3406.0	3329.9	3229.5	3077.2	2897.2	2686.0
47.5°	3115.2	3118.7	3108.3	3101.4	3084.1	3046.0	2990.7	2914.5	2807.2	2634.1	2422.9
50°	2679.1	2679.1	2696.4	2693.0	2693.0	2679.1	2654.9	2609.9	2516.4	2378.0	2180.7
52.5°	2243.0	2249.9	2260.3	2274.1	2291.4	2319.1	2291.4	2270.7	2211.8	2104.5	1934.9
55°	1793.0	1799.9	1817.2	1841.4	1862.3	1890.0	1896.8	1896.8	1865.7	1793.0	1664.9
57.5°	1408.8	1398.4	1412.3	1433.0	1460.7	1488.4	1509.2	1533.4	1529.9	1481.5	1377.6
60°	1059.2	1062.7	1073.0	1093.8	1114.6	1138.8	1166.5	1187.3	1197.7	1173.4	1107.6
62.5°	771.9	771.9	785.7	806.5	816.9	851.5	868.8	879.2	889.5	886.1	844.6
65°	540.0	546.9	553.8	564.2	574.6	595.3	605.7	626.5	633.4	636.9	605.7
67.5°	380.8	370.4	377.3	384.2	394.6	408.5	429.2	429.2	439.6	439.6	418.8
70°	242.3	242.3	245.8	256.1	263.1	266.5	273.5	280.3	290.8	287.3	287.3
72.5°	162.7	159.2	162.7	166.2	169.6	180.0	180.0	183.4	190.4	193.9	180.0
75°	83.1	86.6	93.4	90.0	100.4	93.4	96.9	107.3	103.8	96.9	96.9
77.5°	69.2	69.2	69.2	65.8	72.7	72.7	69.2	76.1	72.7	72.7	69.2
80°	48.4	51.9	48.4	45.0	48.4	45.0	45.0	45.0	45.0	45.0	41.5
82.5°	38.1	31.2	34.6	31.2	34.6	34.6	31.2	27.7	27.7	31.2	27.7
85°	27.7	20.8	24.2	24.2	20.8	20.8	20.8	20.8	20.8	17.3	17.3
87.5°	17.3	10.4	10.4	10.4	13.8	13.8	13.8	10.4	13.8	13.8	6.9
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°	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6
2.5°	6459.0	6455.5	6462.5	6459.0	6459.0	6455.5	6459.0	6455.5	6462.5	6448.6	6452.0
5°	6459.0	6452.0	6455.5	6459.0	6462.5	6455.5	6455.5	6455.5	6462.5	6455.5	6459.0
7.5°	6445.1	6441.6	6452.0	6459.0	6455.5	6452.0	6459.0	6455.5	6462.5	6459.0	6465.8
10°	6417.4	6420.9	6427.8	6438.2	6441.6	6445.1	6452.0	6452.0	6462.5	6448.6	6455.5
12.5°	6375.9	6389.7	6407.1	6413.9	6427.8	6427.8	6434.8	6438.2	6445.1	6441.6	6452.0
15°	6324.0	6341.3	6362.0	6379.4	6396.6	6407.1	6417.4	6420.9	6431.3	6420.9	6424.3
17.5°	6261.6	6282.4	6313.6	6334.3	6362.0	6372.4	6386.2	6393.2	6403.6	6396.6	6400.1
20°	6175.1	6199.4	6234.0	6265.1	6282.4	6306.6	6324.0	6334.3	6341.3	6334.3	6337.8
22.5°	6054.0	6088.6	6133.6	6157.8	6192.4	6213.2	6216.7	6240.9	6258.2	6240.9	6247.8
25°	5912.0	5946.7	5981.3	6033.2	6064.4	6088.6	6112.8	6116.3	6133.6	6130.1	6126.6
27.5°	5676.7	5721.7	5780.5	5822.1	5863.6	5901.7	5929.4	5936.3	5953.6	5946.7	5950.1
30°	5354.7	5403.3	5458.7	5524.4	5583.2	5621.3	5655.9	5680.1	5697.4	5687.1	5683.6
32.5°	4897.9	4946.3	5005.2	5070.9	5140.2	5195.5	5237.1	5268.3	5289.0	5282.1	5264.8
35°	4375.2	4389.0	4427.2	4479.1	4537.9	4596.7	4634.8	4669.4	4693.6	4700.6	4700.6
37.5°	3838.7	3793.7	3766.0	3766.0	3800.6	3824.8	3859.5	3880.2	3918.3	3932.1	3942.5
40°	3319.4	3215.6	3118.7	3046.0	2997.6	2994.1	2994.1	3004.5	3039.1	3084.1	3125.7
42.5°	2855.7	2689.5	2540.7	2405.7	2308.8	2253.4	2229.2	2232.6	2260.3	2301.8	2371.0
45°	2485.3	2277.6	2090.7	1928.0	1796.5	1709.9	1668.4	1664.9	1685.7	1734.1	1810.3
47.5°	2198.0	1976.4	1765.3	1578.4	1436.5	1343.0	1294.6	1280.8	1294.6	1339.5	1429.6
50°	1959.2	1730.7	1512.6	1318.8	1166.5	1069.6	1024.6	1007.3	1024.6	1062.7	1152.6
52.5°	1737.6	1502.2	1298.0	1111.1	948.4	865.3	816.9	806.5	816.9	861.9	934.6
55°	1481.5	1280.8	1079.9	893.0	751.2	668.1	630.0	619.6	630.0	671.5	747.7
57.5°	1228.8	1055.7	879.2	709.6	588.5	515.7	481.1	467.3	491.5	519.2	609.2
60°	993.4	855.0	706.1	557.3	456.9	391.1	363.4	360.0	366.9	401.5	463.8
62.5°	778.9	664.6	546.9	425.8	342.7	315.0	280.3	276.9	283.8	304.6	353.1
65°	560.8	488.1	398.1	311.5	245.8	207.7	193.9	197.3	204.2	218.1	263.1
67.5°	391.1	339.2	276.9	218.1	169.6	152.3	138.5	135.0	138.5	162.7	186.9
70°	263.1	231.9	186.9	166.2	117.7	93.4	96.9	86.6	100.4	100.4	121.1
72.5°	173.0	152.3	124.6	96.9	83.1	65.8	65.8	62.3	69.2	72.7	90.0
75°	90.0	69.2	69.2	48.4	34.6	17.3	31.2	27.7	24.2	27.7	34.6
77.5°	62.3	51.9	48.4	38.1	34.6	27.7	27.7	27.7	27.7	31.2	34.6
80°	38.1	38.1	27.7	24.2	20.8	17.3	20.8	20.8	20.8	20.8	24.2
82.5°	24.2	20.8	20.8	17.3	17.3	13.8	13.8	13.8	13.8	13.8	20.8
85°	20.8	13.8	13.8	10.4	13.8	24.2	10.4	13.8	13.8	13.8	10.4
87.5°	6.9	10.4	10.4	10.4	6.9	3.5	6.9	10.4	10.4	17.3	13.8
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6	6448.6
2.5°	6459.0	6462.5	6462.5	6459.0	6459.0	6452.0	6465.8	6455.5	6459.0	6472.8	6462.5
5°	6465.8	6469.3	6469.3	6465.8	6465.8	6465.8	6469.3	6469.3	6465.8	6462.5	6469.3
7.5°	6479.7	6476.3	6476.3	6469.3	6469.3	6462.5	6469.3	6459.0	6465.8	6459.0	6469.3
10°	6462.5	6465.8	6462.5	6459.0	6459.0	6455.5	6455.5	6445.1	6448.6	6438.2	6445.1
12.5°	6452.0	6448.6	6448.6	6441.6	6434.8	6427.8	6424.3	6413.9	6413.9	6389.7	6400.1
15°	6424.3	6427.8	6417.4	6403.6	6396.6	6379.4	6372.4	6358.5	6344.7	6327.5	6330.9
17.5°	6400.1	6389.7	6375.9	6362.0	6334.3	6320.5	6306.6	6285.9	6278.9	6258.2	6251.3
20°	6327.5	6320.5	6303.2	6278.9	6261.6	6230.5	6216.7	6195.9	6178.6	6157.8	6147.4
22.5°	6234.0	6227.0	6206.3	6182.0	6154.3	6140.5	6126.6	6088.6	6071.3	6050.5	6047.0
25°	6116.3	6105.9	6085.1	6057.4	6043.6	6005.5	5991.6	5963.9	5957.1	5936.3	5932.9
27.5°	5936.3	5922.4	5898.2	5863.6	5839.4	5815.1	5801.3	5780.5	5773.6	5752.8	5749.4
30°	5666.3	5649.0	5600.5	5586.7	5545.1	5520.9	5520.9	5493.2	5496.7	5482.9	5482.9
32.5°	5240.6	5212.9	5174.8	5147.1	5119.4	5105.6	5105.6	5095.1	5102.1	5102.1	5109.0
35°	4676.3	4638.3	4617.5	4600.2	4600.2	4614.0	4655.6	4666.0	4686.7	4704.0	4717.9
37.5°	3952.9	3949.5	3973.7	3994.5	4046.4	4105.2	4177.9	4240.2	4299.0	4340.6	4382.1
40°	3170.6	3257.2	3326.4	3423.4	3502.9	3617.1	3748.7	3856.0	3956.3	4029.1	4105.2
42.5°	2474.9	2585.6	2731.1	2872.9	3014.9	3170.6	3343.7	3492.6	3624.1	3724.4	3804.1
45°	1928.0	2080.3	2256.9	2436.8	2620.3	2814.1	2994.1	3146.4	3284.9	3388.7	3468.3
47.5°	1554.1	1720.3	1921.0	2118.4	2326.1	2530.3	2731.1	2862.6	2976.8	3059.9	3132.6
50°	1284.1	1460.7	1671.9	1896.8	2104.5	2308.8	2481.8	2609.9	2703.4	2776.0	2821.0
52.5°	1073.0	1259.9	1485.0	1709.9	1917.6	2104.5	2260.3	2357.2	2433.4	2485.3	2526.8
55°	886.1	1066.1	1277.3	1488.4	1692.6	1869.1	1997.2	2069.9	2128.7	2159.9	2184.1
57.5°	723.5	889.5	1083.4	1277.3	1453.8	1599.2	1699.6	1772.2	1799.9	1824.2	1820.7
60°	567.7	723.5	900.0	1066.1	1218.4	1336.1	1408.8	1450.3	1471.1	1481.5	1474.5
62.5°	446.5	588.5	723.5	868.8	979.6	1079.9	1149.2	1149.2	1159.6	1163.0	1173.4
65°	332.3	439.6	557.3	664.6	754.5	820.4	858.5	868.8	882.7	879.2	872.3
67.5°	245.8	325.4	411.9	491.5	553.8	595.3	623.0	647.3	643.8	636.9	633.4
70°	169.6	221.6	297.7	346.1	391.1	432.7	439.6	443.0	446.5	450.0	443.0
72.5°	117.7	155.8	197.3	238.8	266.5	283.8	301.2	304.6	304.6	304.6	301.2
75°	58.9	79.6	117.7	135.0	159.2	166.2	180.0	180.0	190.4	176.5	173.0
77.5°	51.9	62.3	83.1	96.9	107.3	117.7	121.1	131.5	128.1	121.1	124.6
80°	31.2	38.1	51.9	58.9	72.7	76.1	79.6	83.1	79.6	83.1	83.1
82.5°	24.2	27.7	34.6	34.6	45.0	45.0	48.4	48.4	51.9	51.9	51.9
85°	13.8	24.2	20.8	41.5	27.7	27.7	34.6	41.5	34.6	34.6	41.5
87.5°	13.8	13.8	10.4	13.8	13.8	13.8	17.3	20.8	20.8	24.2	20.8
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: P249321

CATALOG NUMBER: LD8B120D010 ER8B120835 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	6448.6	6448.6	6448.6	6448.6
2.5°	6459.0	6465.8	6455.5	6452.0
5°	6469.3	6469.3	6462.5	6462.5
7.5°	6469.3	6469.3	6459.0	6452.0
10°	6441.6	6441.6	6431.3	6424.3
12.5°	6389.7	6389.7	6386.2	6375.9
15°	6324.0	6324.0	6310.1	6299.8
17.5°	6234.0	6240.9	6223.6	6223.6
20°	6137.1	6133.6	6119.8	6112.8
22.5°	6036.7	6029.8	6026.3	6005.5
25°	5929.4	5922.4	5912.0	5901.7
27.5°	5745.9	5742.5	5732.1	5718.2
30°	5465.5	5462.0	5448.2	5448.2
32.5°	5102.1	5098.6	5084.8	5088.3
35°	4724.8	4738.7	4731.7	4717.9
37.5°	4409.8	4420.2	4427.2	4420.2
40°	4146.7	4177.9	4181.4	4188.3
42.5°	3866.4	3907.9	3921.8	3928.6
45°	3530.6	3568.7	3599.9	3592.9
47.5°	3187.9	3215.6	3243.3	3222.5
50°	2859.1	2876.4	2886.8	2886.8
52.5°	2547.6	2547.6	2544.1	2547.6
55°	2191.1	2191.1	2177.2	2184.1
57.5°	1817.2	1824.2	1813.7	1796.5
60°	1471.1	1453.8	1446.8	1436.5
62.5°	1145.7	1145.7	1121.5	1152.6
65°	858.5	848.0	837.6	834.2
67.5°	623.0	619.6	609.2	605.7
70°	439.6	425.8	422.3	415.3
72.5°	294.2	294.2	287.3	287.3
75°	180.0	162.7	159.2	162.7
77.5°	124.6	121.1	121.1	117.7
80°	83.1	79.6	86.6	76.1
82.5°	51.9	55.4	51.9	55.4
85°	34.6	41.5	38.1	38.1
87.5°	20.8	20.8	20.8	20.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)