

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: P249450

Luminaire Tested: **LD8B200D010 ER8B200850 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249450  
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: LD8B200D010 ER8B200850 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 5000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19643.0 lumens  
Efficiency: N/A  
Efficacy: 88.0 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

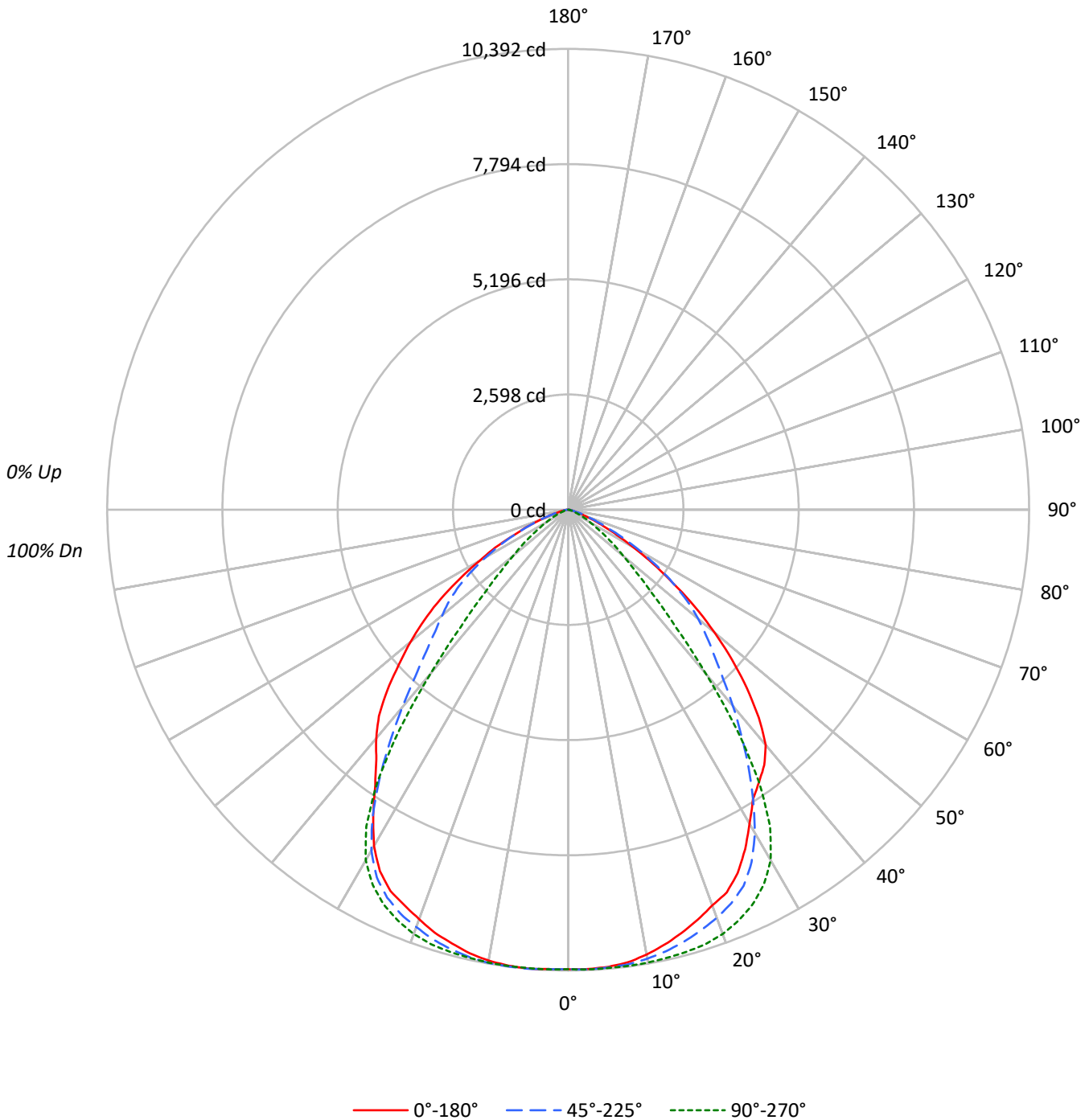
Input Watts (W): 223.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	319588	319588	319588
5°	320291	321155	321502
10°	318944	324693	323300
15°	315410	329441	323228
20°	311624	334073	322394
25°	307578	334457	322722
30°	290985	325054	311783
35°	282298	282505	285441
40°	278803	194374	270965
45°	248424	116689	251821
50°	206566	77663	222575
55°	154924	53541	188719
60°	104985	35678	142384
65°	63326	23144	97817
70°	35108	12541	60181
75°	15906	5302	31156
80°	13833	5931	21736
85°	15744	7855	21688



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	989.1	5.0
10°-20°	2872.5	14.6
20°-30°	4359.9	22.2
30°-40°	4579.2	23.3
40°-50°	3433.2	17.5
50°-60°	2202.8	11.2
60°-70°	942.3	4.8
70°-80°	222.6	1.1
80°-90°	41.4	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°	8221.5	41.9
0°-40°	12800.7	65.2
0°-60°	18436.6	93.9
0°-90°	19643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19643.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	10364	10364	10364	10364	10364	
5°	10347	10364	10375	10392	10386	983
15°	9880	10086	10320	10253	10125	2787
25°	9040	9357	9830	9652	9485	4130
35°	7499	7082	7505	7416	7583	4707
45°	5697	4656	2676	4523	5774	4363
55°	2882	2882	996	3004	3510	2614
65°	868	1024	317	1318	1341	926
75°	134	156	44	267	262	194
85°	44	28	22	44	61	47
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°	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0
2.5°	10369.6	10380.8	10375.2	10375.2	10369.6	10375.2	10375.2	10386.4	10386.4	10375.2	10369.6
5°	10347.3	10358.5	10358.5	10347.3	10347.3	10375.2	10358.5	10369.6	10369.6	10364.0	10364.0
7.5°	10297.3	10297.3	10319.5	10302.9	10302.9	10319.5	10313.9	10325.1	10336.3	10341.8	10341.8
10°	10186.0	10197.1	10202.7	10202.7	10208.3	10224.9	10236.1	10258.4	10269.4	10280.6	10286.2
12.5°	10047.0	10063.6	10069.2	10063.6	10080.4	10102.5	10130.4	10158.2	10175.0	10197.1	10213.9
15°	9880.0	9880.0	9891.2	9907.9	9919.1	9952.4	9980.2	10013.5	10058.0	10085.9	10113.7
17.5°	9696.5	9707.7	9724.3	9724.3	9746.6	9802.1	9818.9	9869.0	9919.1	9946.8	10002.5
20°	9496.3	9507.3	9524.0	9535.2	9563.0	9607.5	9640.8	9685.3	9741.0	9791.1	9846.6
22.5°	9340.4	9318.2	9329.3	9340.4	9368.3	9407.2	9446.2	9501.7	9557.4	9607.5	9663.1
25°	9040.0	9045.6	9062.3	9073.3	9106.8	9140.2	9184.7	9251.4	9301.5	9357.2	9418.3
27.5°	8633.9	8639.5	8667.3	8667.3	8695.1	8750.7	8778.5	8834.2	8901.0	8956.6	9029.0
30°	8172.2	8183.3	8183.3	8205.6	8222.2	8250.1	8277.9	8333.5	8366.9	8417.0	8517.2
32.5°	7749.4	7760.5	7754.9	7749.4	7732.7	7727.1	7721.5	7732.7	7743.9	7760.5	7799.4
35°	7499.1	7471.2	7449.0	7410.1	7365.6	7309.9	7259.8	7193.1	7131.9	7081.8	7026.2
37.5°	7259.8	7254.2	7220.9	7165.2	7076.2	6976.1	6859.4	6714.7	6570.0	6414.2	6264.1
40°	6926.1	6909.3	6881.5	6803.7	6703.5	6581.1	6425.4	6247.4	6013.6	5774.5	5529.7
42.5°	6358.6	6364.2	6330.8	6269.5	6175.1	6058.2	5896.9	5702.2	5451.9	5168.1	4851.0
45°	5696.6	5696.6	5685.5	5635.4	5568.7	5474.1	5351.7	5190.4	4945.6	4656.3	4316.9
47.5°	5006.8	5012.3	4995.6	4984.6	4956.7	4895.6	4806.5	4684.2	4511.7	4233.5	3894.1
50°	4305.9	4305.9	4333.6	4328.1	4328.1	4305.9	4266.9	4194.5	4044.4	3821.8	3504.8
52.5°	3604.9	3616.0	3632.8	3655.0	3682.7	3727.2	3682.7	3649.4	3554.8	3382.3	3109.8
55°	2881.7	2892.8	2920.6	2959.5	2993.0	3037.5	3048.5	3048.5	2998.5	2881.7	2675.8
57.5°	2264.2	2247.5	2269.8	2303.1	2347.7	2392.2	2425.5	2464.5	2458.9	2381.0	2214.1
60°	1702.3	1707.9	1724.5	1758.0	1791.3	1830.3	1874.8	1908.1	1924.9	1885.9	1780.2
62.5°	1240.6	1240.6	1262.8	1296.1	1312.9	1368.5	1396.3	1413.1	1429.7	1424.1	1357.4
65°	867.9	878.9	890.1	906.8	923.4	956.8	973.5	1006.9	1018.0	1023.6	973.5
67.5°	612.0	595.3	606.4	617.4	634.2	656.5	689.9	689.9	706.5	706.5	673.1
70°	389.4	389.4	395.0	411.6	422.8	428.4	439.5	450.6	467.3	461.7	461.7
72.5°	261.5	255.9	261.5	267.1	272.6	289.3	289.3	294.8	306.0	311.6	289.3
75°	133.5	139.1	150.1	144.7	161.3	150.1	155.7	172.5	166.9	155.7	155.7
77.5°	111.2	111.2	111.2	105.8	116.8	116.8	111.2	122.4	116.8	116.8	111.2
80°	77.9	83.4	77.9	72.3	77.9	72.3	72.3	72.3	72.3	72.3	66.7
82.5°	61.3	50.1	55.7	50.1	55.7	55.7	50.1	44.5	44.5	50.1	44.5
85°	44.5	33.4	38.9	38.9	33.4	33.4	33.4	33.4	33.4	27.8	27.8
87.5°	27.8	16.7	16.7	16.7	22.2	22.2	22.2	16.7	22.2	22.2	11.2
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°	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0
2.5°	10380.8	10375.2	10386.4	10380.8	10380.8	10375.2	10380.8	10375.2	10386.4	10364.0	10369.6
5°	10380.8	10369.6	10375.2	10380.8	10386.4	10375.2	10375.2	10375.2	10386.4	10375.2	10380.8
7.5°	10358.5	10352.9	10369.6	10380.8	10375.2	10369.6	10380.8	10375.2	10386.4	10380.8	10391.8
10°	10313.9	10319.5	10330.7	10347.3	10352.9	10358.5	10369.6	10369.6	10386.4	10364.0	10375.2
12.5°	10247.2	10269.4	10297.3	10308.4	10330.7	10330.7	10341.8	10347.3	10358.5	10352.9	10369.6
15°	10163.8	10191.6	10224.9	10252.8	10280.6	10297.3	10313.9	10319.5	10336.3	10319.5	10325.1
17.5°	10063.6	10097.0	10147.1	10180.4	10224.9	10241.7	10263.9	10275.0	10291.8	10280.6	10286.2
20°	9924.5	9963.6	10019.1	10069.2	10097.0	10135.9	10163.8	10180.4	10191.6	10180.4	10186.0
22.5°	9729.9	9785.5	9857.8	9896.7	9952.4	9985.8	9991.3	10030.3	10058.0	10030.3	10041.4
25°	9501.7	9557.4	9613.1	9696.5	9746.6	9785.5	9824.5	9830.0	9857.8	9852.2	9846.6
27.5°	9123.4	9195.8	9290.3	9357.2	9423.9	9485.1	9529.6	9540.6	9568.5	9557.4	9563.0
30°	8606.0	8684.0	8773.1	8878.7	8973.3	9034.4	9090.1	9129.0	9156.8	9140.2	9134.6
32.5°	7871.8	7949.7	8044.3	8149.9	8261.2	8350.1	8417.0	8467.1	8500.4	8489.3	8461.5
35°	7031.8	7054.0	7115.3	7198.7	7293.2	7387.8	7449.0	7504.6	7543.5	7554.7	7554.7
37.5°	6169.5	6097.2	6052.7	6052.7	6108.2	6147.2	6202.8	6236.2	6297.4	6319.6	6336.4
40°	5334.9	5168.1	5012.3	4895.6	4817.7	4812.1	4812.1	4828.7	4884.4	4956.7	5023.5
42.5°	4589.6	4322.5	4083.3	3866.3	3710.6	3621.6	3582.7	3588.3	3632.8	3699.5	3810.7
45°	3994.3	3660.5	3360.1	3098.6	2887.2	2748.1	2681.4	2675.8	2709.2	2787.1	2909.6
47.5°	3532.6	3176.5	2837.1	2536.7	2308.7	2158.5	2080.6	2058.4	2080.6	2152.9	2297.6
50°	3148.7	2781.6	2431.1	2119.5	1874.8	1719.1	1646.6	1618.9	1646.6	1707.9	1852.5
52.5°	2792.6	2414.4	2086.2	1785.8	1524.3	1390.7	1312.9	1296.1	1312.9	1385.2	1502.1
55°	2381.0	2058.4	1735.7	1435.2	1207.2	1073.7	1012.5	995.9	1012.5	1079.3	1201.7
57.5°	1975.0	1696.7	1413.1	1140.4	945.8	828.8	773.3	751.0	789.9	834.4	979.1
60°	1596.6	1374.1	1134.8	895.7	734.4	628.6	584.1	578.5	589.7	645.3	745.4
62.5°	1251.8	1068.1	878.9	684.3	550.7	506.2	450.6	445.1	456.1	489.5	567.5
65°	901.2	784.5	639.8	500.7	395.0	333.8	311.6	317.2	328.2	350.5	422.8
67.5°	628.6	545.2	445.1	350.5	272.6	244.7	222.6	217.0	222.6	261.5	300.4
70°	422.8	372.7	300.4	267.1	189.2	150.1	155.7	139.1	161.3	161.3	194.7
72.5°	278.1	244.7	200.2	155.7	133.5	105.8	105.8	100.2	111.2	116.8	144.7
75°	144.7	111.2	111.2	77.9	55.7	27.8	50.1	44.5	38.9	44.5	55.7
77.5°	100.2	83.4	77.9	61.3	55.7	44.5	44.5	44.5	44.5	50.1	55.7
80°	61.3	61.3	44.5	38.9	33.4	27.8	33.4	33.4	33.4	33.4	38.9
82.5°	38.9	33.4	33.4	27.8	27.8	22.2	22.2	22.2	22.2	22.2	33.4
85°	33.4	22.2	22.2	16.7	22.2	38.9	16.7	22.2	22.2	22.2	16.7
87.5°	11.2	16.7	16.7	16.7	11.2	5.6	11.2	16.7	16.7	27.8	22.2
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°	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0	10364.0
2.5°	10380.8	10386.4	10386.4	10380.8	10380.8	10369.6	10391.8	10375.2	10380.8	10403.0	10386.4
5°	10391.8	10397.4	10397.4	10391.8	10391.8	10391.8	10397.4	10397.4	10391.8	10386.4	10397.4
7.5°	10414.1	10408.5	10408.5	10397.4	10397.4	10386.4	10397.4	10380.8	10391.8	10380.8	10397.4
10°	10386.4	10391.8	10386.4	10380.8	10380.8	10375.2	10375.2	10358.5	10364.0	10347.3	10358.5
12.5°	10369.6	10364.0	10364.0	10352.9	10341.8	10330.7	10325.1	10308.4	10308.4	10269.4	10286.2
15°	10325.1	10330.7	10313.9	10291.8	10280.6	10252.8	10241.7	10219.3	10197.1	10169.4	10175.0
17.5°	10286.2	10269.4	10247.2	10224.9	10180.4	10158.2	10135.9	10102.5	10091.4	10058.0	10047.0
20°	10169.4	10158.2	10130.4	10091.4	10063.6	10013.5	9991.3	9958.0	9930.1	9896.7	9880.0
22.5°	10019.1	10007.9	9974.6	9935.7	9891.2	9869.0	9846.6	9785.5	9757.6	9724.3	9718.7
25°	9830.0	9813.3	9779.9	9735.4	9713.1	9652.0	9629.7	9585.2	9574.1	9540.6	9535.2
27.5°	9540.6	9518.5	9479.5	9423.9	9384.9	9346.0	9323.8	9290.3	9279.3	9245.8	9240.4
30°	9106.8	9078.9	9001.1	8978.9	8912.0	8873.1	8873.1	8828.6	8834.2	8812.0	8812.0
32.5°	8422.6	8378.0	8316.8	8272.3	8227.8	8205.6	8205.6	8188.8	8200.0	8200.0	8211.2
35°	7515.7	7454.6	7421.1	7393.4	7393.4	7415.5	7482.4	7499.1	7532.5	7560.2	7582.6
37.5°	6353.0	6347.5	6386.5	6419.8	6503.3	6597.9	6714.7	6814.8	6909.3	6976.1	7042.8
40°	5095.8	5234.9	5346.1	5502.0	5629.8	5813.4	6024.8	6197.3	6358.6	6475.5	6597.9
42.5°	3977.6	4155.6	4389.3	4617.3	4845.5	5095.8	5374.0	5613.2	5824.6	5985.9	6113.8
45°	3098.6	3343.4	3627.2	3916.4	4211.3	4522.9	4812.1	5056.9	5279.4	5446.3	5574.2
47.5°	2497.8	2764.9	3087.5	3404.6	3738.4	4066.6	4389.3	4600.7	4784.2	4917.7	5034.7
50°	2063.9	2347.7	2687.0	3048.5	3382.3	3710.6	3988.7	4194.5	4344.8	4461.6	4533.9
52.5°	1724.5	2024.9	2386.6	2748.1	3081.9	3382.3	3632.8	3788.5	3910.9	3994.3	4061.0
55°	1424.1	1713.5	2052.8	2392.2	2720.4	3004.0	3209.8	3326.8	3421.2	3471.3	3510.3
57.5°	1162.7	1429.7	1741.2	2052.8	2336.5	2570.2	2731.5	2848.3	2892.8	2931.8	2926.2
60°	912.4	1162.7	1446.4	1713.5	1958.2	2147.3	2264.2	2330.9	2364.3	2381.0	2369.8
62.5°	717.6	945.8	1162.7	1396.3	1574.4	1735.7	1847.0	1847.0	1863.6	1869.2	1885.9
65°	534.0	706.5	895.7	1068.1	1212.7	1318.5	1379.7	1396.3	1418.6	1413.1	1401.9
67.5°	395.0	523.0	662.0	789.9	890.1	956.8	1001.3	1040.4	1034.8	1023.6	1018.0
70°	272.6	356.1	478.5	556.3	628.6	695.4	706.5	712.0	717.6	723.2	712.0
72.5°	189.2	250.3	317.2	383.9	428.4	456.1	484.0	489.5	489.5	489.5	484.0
75°	94.6	128.0	189.2	217.0	255.9	267.1	289.3	289.3	306.0	283.7	278.1
77.5°	83.4	100.2	133.5	155.7	172.5	189.2	194.7	211.4	205.8	194.7	200.2
80°	50.1	61.3	83.4	94.6	116.8	122.4	128.0	133.5	128.0	133.5	133.5
82.5°	38.9	44.5	55.7	55.7	72.3	72.3	77.9	77.9	83.4	83.4	83.4
85°	22.2	38.9	33.4	66.7	44.5	44.5	55.7	66.7	55.7	55.7	66.7
87.5°	22.2	22.2	16.7	22.2	22.2	22.2	27.8	33.4	33.4	38.9	33.4
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: P249450

CATALOG NUMBER: LD8B200D010 ER8B200850 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	10364.0	10364.0	10364.0	10364.0
2.5°	10380.8	10391.8	10375.2	10369.6
5°	10397.4	10397.4	10386.4	10386.4
7.5°	10397.4	10397.4	10380.8	10369.6
10°	10352.9	10352.9	10336.3	10325.1
12.5°	10269.4	10269.4	10263.9	10247.2
15°	10163.8	10163.8	10141.5	10124.9
17.5°	10019.1	10030.3	10002.5	10002.5
20°	9863.4	9857.8	9835.6	9824.5
22.5°	9702.1	9690.9	9685.3	9652.0
25°	9529.6	9518.5	9501.7	9485.1
27.5°	9234.8	9229.2	9212.5	9190.3
30°	8784.1	8778.5	8756.3	8756.3
32.5°	8200.0	8194.4	8172.2	8177.8
35°	7593.6	7615.9	7604.7	7582.6
37.5°	7087.4	7104.1	7115.3	7104.1
40°	6664.6	6714.7	6720.2	6731.4
42.5°	6214.0	6280.7	6303.0	6314.1
45°	5674.3	5735.5	5785.6	5774.5
47.5°	5123.6	5168.1	5212.6	5179.2
50°	4595.1	4622.9	4639.6	4639.6
52.5°	4094.5	4094.5	4088.9	4094.5
55°	3521.4	3521.4	3499.2	3510.3
57.5°	2920.6	2931.8	2915.0	2887.2
60°	2364.3	2336.5	2325.3	2308.7
62.5°	1841.4	1841.4	1802.5	1852.5
65°	1379.7	1363.0	1346.2	1340.6
67.5°	1001.3	995.9	979.1	973.5
70°	706.5	684.3	678.7	667.5
72.5°	472.9	472.9	461.7	461.7
75°	289.3	261.5	255.9	261.5
77.5°	200.2	194.7	194.7	189.2
80°	133.5	128.0	139.1	122.4
82.5°	83.4	89.0	83.4	89.0
85°	55.7	66.7	61.3	61.3
87.5°	33.4	33.4	33.4	33.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)