

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: P249594

Luminaire Tested: **LD8B200D010 ER8B200940 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249594  
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 ER8B200940 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
90 CRI 4000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19298.0 lumens  
Efficiency: N/A  
Efficacy: 86.4 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

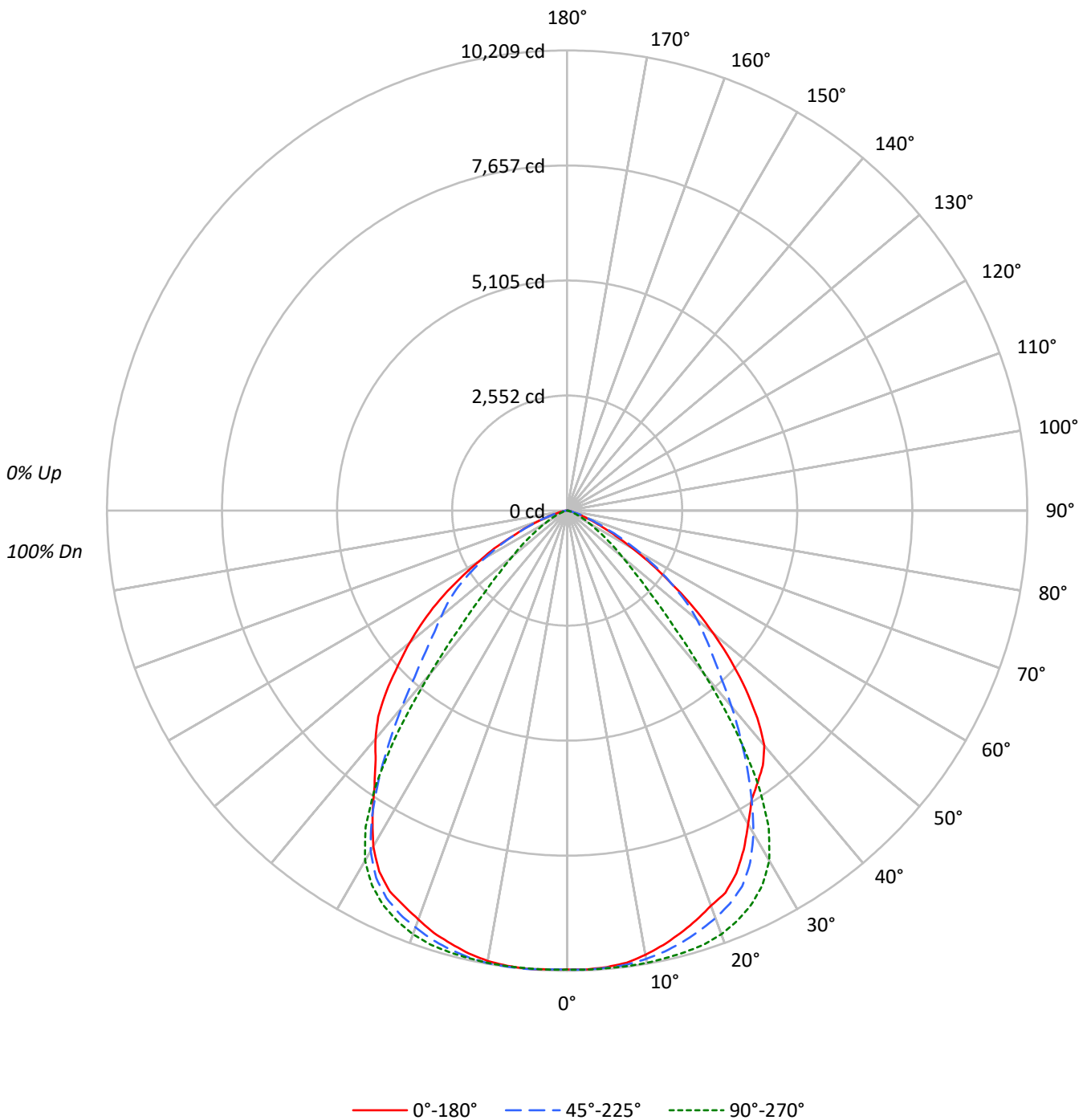
Input Watts (W): 223.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	313975	313975	313975
5°	314667	315515	315853
10°	313342	318991	317623
15°	309871	323656	317549
20°	306151	328206	316730
25°	302175	328584	317054
30°	285876	319346	306307
35°	277340	277543	280427
40°	273904	190961	266207
45°	244063	114640	247399
50°	202939	76296	218670
55°	152199	52600	185402
60°	103141	35055	139886
65°	62217	22736	96102
70°	34495	12325	59127
75°	15631	5207	30608
80°	13585	5825	21345
85°	15461	7713	21299



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	971.7	5.0
10°-20°	2822.0	14.6
20°-30°	4283.3	22.2
30°-40°	4498.8	23.3
40°-50°	3372.9	17.5
50°-60°	2164.1	11.2
60°-70°	925.8	4.8
70°-80°	218.7	1.1
80°-90°	40.7	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°	8077.1	41.9
0°-40°	12575.8	65.2
0°-60°	18112.8	93.9
0°-90°	19298.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19298.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	10182	10182	10182	10182	10182	
5°	10166	10182	10193	10209	10204	966
15°	9706	9909	10138	10073	9947	2738
25°	8881	9193	9657	9482	9318	4057
35°	7367	6957	7373	7285	7449	4624
45°	5597	4574	2629	4443	5673	4286
55°	2831	2831	978	2951	3449	2568
65°	853	1006	312	1295	1317	910
75°	131	153	44	262	257	191
85°	44	27	22	44	60	46
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°	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0
2.5°	10187.5	10198.5	10193.0	10193.0	10187.5	10193.0	10193.0	10203.9	10203.9	10193.0	10187.5
5°	10165.6	10176.5	10176.5	10165.6	10165.6	10193.0	10176.5	10187.5	10187.5	10182.0	10182.0
7.5°	10116.5	10116.5	10138.3	10122.0	10122.0	10138.3	10132.8	10143.8	10154.7	10160.2	10160.2
10°	10007.1	10018.1	10023.5	10023.5	10029.0	10045.3	10056.3	10078.2	10089.1	10100.0	10105.5
12.5°	9870.5	9886.9	9892.3	9886.9	9903.3	9925.1	9952.5	9979.8	9996.3	10018.1	10034.5
15°	9706.5	9706.5	9717.4	9733.9	9744.8	9777.6	9804.9	9837.7	9881.4	9908.8	9936.1
17.5°	9526.2	9537.2	9553.5	9553.5	9575.4	9630.0	9646.4	9695.6	9744.8	9772.1	9826.8
20°	9329.5	9340.3	9356.8	9367.7	9395.0	9438.7	9471.5	9515.2	9569.9	9619.1	9673.7
22.5°	9176.4	9154.6	9165.4	9176.4	9203.8	9242.0	9280.3	9334.8	9389.5	9438.7	9493.4
25°	8881.2	8886.7	8903.2	8914.0	8946.9	8979.6	9023.4	9088.9	9138.1	9192.8	9252.9
27.5°	8482.3	8487.8	8515.1	8515.1	8542.4	8597.0	8624.3	8679.0	8744.7	8799.2	8870.4
30°	8028.7	8039.5	8039.5	8061.5	8077.8	8105.2	8132.5	8187.2	8219.9	8269.1	8367.6
32.5°	7613.3	7624.2	7618.7	7613.3	7596.9	7591.4	7585.9	7596.9	7607.9	7624.2	7662.4
35°	7367.4	7340.0	7318.2	7279.9	7236.2	7181.5	7132.3	7066.8	7006.6	6957.4	6902.8
37.5°	7132.3	7126.8	7094.1	7039.4	6951.9	6853.6	6738.9	6596.7	6454.6	6301.6	6154.1
40°	6804.4	6788.0	6760.7	6684.2	6585.8	6465.5	6312.5	6137.6	5908.0	5673.1	5432.6
42.5°	6246.9	6252.4	6219.6	6159.4	6066.6	5951.8	5793.3	5602.0	5356.1	5077.3	4765.8
45°	5596.6	5596.6	5585.6	5536.4	5470.9	5377.9	5257.7	5099.2	4858.8	4574.5	4241.1
47.5°	4918.8	4924.3	4907.9	4897.0	4869.6	4809.6	4722.1	4601.9	4432.5	4159.1	3825.7
50°	4230.3	4230.3	4257.5	4252.1	4252.1	4230.3	4192.0	4120.9	3973.4	3754.7	3443.3
52.5°	3541.6	3552.5	3569.0	3590.8	3618.0	3661.8	3618.0	3585.3	3492.3	3322.9	3055.2
55°	2831.0	2842.0	2869.3	2907.5	2940.4	2984.2	2995.0	2995.0	2945.8	2831.0	2628.8
57.5°	2224.4	2208.0	2229.9	2262.7	2306.4	2350.2	2382.9	2421.2	2415.7	2339.2	2175.2
60°	1672.4	1677.9	1694.2	1727.1	1759.9	1798.1	1841.9	1874.6	1891.1	1852.8	1748.9
62.5°	1218.8	1218.8	1240.6	1273.4	1289.8	1344.5	1371.8	1388.2	1404.6	1399.1	1333.5
65°	852.7	863.5	874.5	890.9	907.2	940.0	956.4	989.2	1000.2	1005.6	956.4
67.5°	601.2	584.8	595.8	606.6	623.0	645.0	677.7	677.7	694.1	694.1	661.3
70°	382.6	382.6	388.1	404.4	415.4	420.8	431.8	442.6	459.1	453.6	453.6
72.5°	256.9	251.4	256.9	262.4	267.9	284.2	284.2	289.7	300.6	306.1	284.2
75°	131.2	136.7	147.5	142.2	158.5	147.5	153.0	169.4	164.0	153.0	153.0
77.5°	109.3	109.3	109.3	103.9	114.7	114.7	109.3	120.2	114.7	114.7	109.3
80°	76.5	82.0	76.5	71.0	76.5	71.0	71.0	71.0	71.0	71.0	65.5
82.5°	60.2	49.2	54.7	49.2	54.7	54.7	49.2	43.7	43.7	49.2	43.7
85°	43.7	32.8	38.2	38.2	32.8	32.8	32.8	32.8	32.8	27.3	27.3
87.5°	27.3	16.4	16.4	16.4	21.8	21.8	21.8	16.4	21.8	21.8	11.0
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°	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0
2.5°	10198.5	10193.0	10203.9	10198.5	10198.5	10193.0	10198.5	10193.0	10203.9	10182.0	10187.5
5°	10198.5	10187.5	10193.0	10198.5	10203.9	10193.0	10193.0	10193.0	10203.9	10193.0	10198.5
7.5°	10176.5	10171.0	10187.5	10198.5	10193.0	10187.5	10198.5	10193.0	10203.9	10198.5	10209.3
10°	10132.8	10138.3	10149.2	10165.6	10171.0	10176.5	10187.5	10187.5	10203.9	10182.0	10193.0
12.5°	10067.3	10089.1	10116.5	10127.3	10149.2	10149.2	10160.2	10165.6	10176.5	10171.0	10187.5
15°	9985.3	10012.6	10045.3	10072.7	10100.0	10116.5	10132.8	10138.3	10154.7	10138.3	10143.8
17.5°	9886.9	9919.6	9968.8	10001.6	10045.3	10061.8	10083.6	10094.5	10111.0	10100.0	10105.5
20°	9750.2	9788.6	9843.1	9892.3	9919.6	9957.9	9985.3	10001.6	10012.6	10001.6	10007.1
22.5°	9559.0	9613.7	9684.7	9722.9	9777.6	9810.4	9815.9	9854.1	9881.4	9854.1	9865.1
25°	9334.8	9389.5	9444.2	9526.2	9575.4	9613.7	9651.9	9657.4	9684.7	9679.2	9673.7
27.5°	8963.2	9034.3	9127.2	9192.8	9258.3	9318.5	9362.2	9373.1	9400.5	9389.5	9395.0
30°	8454.9	8531.5	8619.0	8722.8	8815.7	8875.7	8930.4	8968.7	8996.0	8979.6	8974.2
32.5°	7733.6	7810.0	7903.0	8006.8	8116.2	8203.5	8269.1	8318.4	8351.1	8340.2	8312.9
35°	6908.3	6930.1	6990.3	7072.3	7165.1	7258.0	7318.2	7372.8	7411.0	7422.0	7422.0
37.5°	6061.1	5990.1	5946.4	5946.4	6001.0	6039.2	6093.9	6126.7	6186.8	6208.6	6225.1
40°	5241.2	5077.3	4924.3	4809.6	4733.1	4727.6	4727.6	4743.9	4798.6	4869.6	4935.3
42.5°	4508.9	4246.6	4011.6	3798.4	3645.5	3558.0	3519.7	3525.2	3569.0	3634.5	3743.7
45°	3924.1	3596.2	3301.1	3044.2	2836.5	2699.9	2634.3	2628.8	2661.6	2738.1	2858.5
47.5°	3470.5	3120.7	2787.3	2492.2	2268.2	2120.5	2044.1	2022.2	2044.1	2115.1	2257.2
50°	3093.4	2732.8	2388.4	2082.3	1841.9	1688.9	1617.7	1590.4	1617.7	1677.9	1819.9
52.5°	2743.6	2372.0	2049.5	1754.4	1497.5	1366.3	1289.8	1273.4	1289.8	1360.8	1475.7
55°	2339.2	2022.2	1705.2	1410.0	1186.0	1054.9	994.7	978.4	994.7	1060.3	1180.6
57.5°	1940.3	1666.9	1388.2	1120.4	929.1	814.3	759.7	737.8	776.0	819.8	961.9
60°	1568.5	1350.0	1114.9	879.9	721.5	617.6	573.8	568.4	579.3	634.0	732.3
62.5°	1229.8	1049.4	863.5	672.3	541.1	497.3	442.6	437.3	448.1	480.9	557.5
65°	885.4	770.7	628.5	491.9	388.1	327.9	306.1	311.6	322.4	344.4	415.4
67.5°	617.6	535.6	437.3	344.4	267.9	240.4	218.6	213.2	218.6	256.9	295.1
70°	415.4	366.2	295.1	262.4	185.9	147.5	153.0	136.7	158.5	158.5	191.2
72.5°	273.2	240.4	196.7	153.0	131.2	103.9	103.9	98.4	109.3	114.7	142.2
75°	142.2	109.3	109.3	76.5	54.7	27.3	49.2	43.7	38.2	43.7	54.7
77.5°	98.4	82.0	76.5	60.2	54.7	43.7	43.7	43.7	43.7	49.2	54.7
80°	60.2	60.2	43.7	38.2	32.8	27.3	32.8	32.8	32.8	32.8	38.2
82.5°	38.2	32.8	32.8	27.3	27.3	21.8	21.8	21.8	21.8	21.8	32.8
85°	32.8	21.8	21.8	16.4	21.8	38.2	16.4	21.8	21.8	21.8	16.4
87.5°	11.0	16.4	16.4	16.4	11.0	5.5	11.0	16.4	16.4	27.3	21.8
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°	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0	10182.0
2.5°	10198.5	10203.9	10203.9	10198.5	10198.5	10187.5	10209.3	10193.0	10198.5	10220.3	10203.9
5°	10209.3	10214.8	10214.8	10209.3	10209.3	10209.3	10214.8	10214.8	10209.3	10203.9	10214.8
7.5°	10231.2	10225.7	10225.7	10214.8	10214.8	10203.9	10214.8	10198.5	10209.3	10198.5	10214.8
10°	10203.9	10209.3	10203.9	10198.5	10198.5	10193.0	10193.0	10176.5	10182.0	10165.6	10176.5
12.5°	10187.5	10182.0	10182.0	10171.0	10160.2	10149.2	10143.8	10127.3	10127.3	10089.1	10105.5
15°	10143.8	10149.2	10132.8	10111.0	10100.0	10072.7	10061.8	10039.9	10018.1	9990.8	9996.3
17.5°	10105.5	10089.1	10067.3	10045.3	10001.6	9979.8	9957.9	9925.1	9914.1	9881.4	9870.5
20°	9990.8	9979.8	9952.5	9914.1	9886.9	9837.7	9815.9	9783.1	9755.7	9722.9	9706.5
22.5°	9843.1	9832.2	9799.4	9761.2	9717.4	9695.6	9673.7	9613.7	9586.2	9553.5	9548.0
25°	9657.4	9640.9	9608.2	9564.4	9542.5	9482.5	9460.5	9416.8	9406.0	9373.1	9367.7
27.5°	9373.1	9351.3	9313.0	9258.3	9220.1	9181.8	9160.0	9127.2	9116.3	9083.4	9078.1
30°	8946.9	8919.5	8843.0	8821.2	8755.5	8717.3	8717.3	8673.5	8679.0	8657.2	8657.2
32.5°	8274.6	8230.9	8170.7	8127.0	8083.3	8061.5	8061.5	8045.0	8056.0	8056.0	8066.9
35°	7383.7	7323.7	7290.8	7263.5	7263.5	7285.3	7351.0	7367.4	7400.2	7427.5	7449.4
37.5°	6241.4	6236.1	6274.3	6307.1	6389.0	6482.0	6596.7	6695.1	6788.0	6853.6	6919.1
40°	5006.3	5143.0	5252.2	5405.3	5530.9	5711.3	5919.0	6088.4	6246.9	6361.8	6482.0
42.5°	3907.7	4082.6	4312.2	4536.2	4760.4	5006.3	5279.6	5514.6	5722.3	5880.7	6006.4
45°	3044.2	3284.7	3563.5	3847.7	4137.3	4443.4	4727.6	4968.0	5186.7	5350.6	5476.3
47.5°	2453.9	2716.3	3033.2	3344.8	3672.7	3995.2	4312.2	4519.9	4700.2	4831.4	4946.2
50°	2027.6	2306.4	2639.8	2995.0	3322.9	3645.5	3918.7	4120.9	4268.5	4383.2	4454.3
52.5°	1694.2	1989.4	2344.7	2699.9	3027.8	3322.9	3569.0	3721.9	3842.2	3924.1	3989.7
55°	1399.1	1683.4	2016.8	2350.2	2672.6	2951.3	3153.5	3268.3	3361.2	3410.4	3448.6
57.5°	1142.3	1404.6	1710.7	2016.8	2295.5	2525.1	2683.5	2798.3	2842.0	2880.3	2874.8
60°	896.4	1142.3	1421.0	1683.4	1923.8	2109.6	2224.4	2290.0	2322.7	2339.2	2328.2
62.5°	705.0	929.1	1142.3	1371.8	1546.7	1705.2	1814.6	1814.6	1830.9	1836.4	1852.8
65°	524.6	694.1	879.9	1049.4	1191.4	1295.3	1355.5	1371.8	1393.7	1388.2	1377.3
67.5°	388.1	513.8	650.3	776.0	874.5	940.0	983.7	1022.1	1016.6	1005.6	1000.2
70°	267.9	349.8	470.1	546.6	617.6	683.2	694.1	699.5	705.0	710.5	699.5
72.5°	185.9	245.9	311.6	377.1	420.8	448.1	475.5	480.9	480.9	480.9	475.5
75°	92.9	125.7	185.9	213.2	251.4	262.4	284.2	284.2	300.6	278.7	273.2
77.5°	82.0	98.4	131.2	153.0	169.4	185.9	191.2	207.7	202.2	191.2	196.7
80°	49.2	60.2	82.0	92.9	114.7	120.2	125.7	131.2	125.7	131.2	131.2
82.5°	38.2	43.7	54.7	54.7	71.0	71.0	76.5	76.5	82.0	82.0	82.0
85°	21.8	38.2	32.8	65.5	43.7	43.7	54.7	65.5	54.7	54.7	65.5
87.5°	21.8	21.8	16.4	21.8	21.8	21.8	27.3	32.8	32.8	38.2	32.8
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: P249594

CATALOG NUMBER: LD8B200D010 ER8B200940 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	10182.0	10182.0	10182.0	10182.0
2.5°	10198.5	10209.3	10193.0	10187.5
5°	10214.8	10214.8	10203.9	10203.9
7.5°	10214.8	10214.8	10198.5	10187.5
10°	10171.0	10171.0	10154.7	10143.8
12.5°	10089.1	10089.1	10083.6	10067.3
15°	9985.3	9985.3	9963.4	9947.0
17.5°	9843.1	9854.1	9826.8	9826.8
20°	9690.1	9684.7	9662.9	9651.9
22.5°	9531.7	9520.7	9515.2	9482.5
25°	9362.2	9351.3	9334.8	9318.5
27.5°	9072.6	9067.1	9050.7	9028.9
30°	8629.8	8624.3	8602.5	8602.5
32.5°	8056.0	8050.5	8028.7	8034.2
35°	7460.2	7482.1	7471.2	7449.4
37.5°	6962.9	6979.3	6990.3	6979.3
40°	6547.5	6596.7	6602.2	6613.2
42.5°	6104.9	6170.4	6192.3	6203.2
45°	5574.6	5634.8	5684.0	5673.1
47.5°	5033.6	5077.3	5121.0	5088.3
50°	4514.4	4541.7	4558.2	4558.2
52.5°	4022.6	4022.6	4017.1	4022.6
55°	3459.6	3459.6	3437.8	3448.6
57.5°	2869.3	2880.3	2863.8	2836.5
60°	2322.7	2295.5	2284.5	2268.2
62.5°	1809.1	1809.1	1770.8	1819.9
65°	1355.5	1339.0	1322.6	1317.1
67.5°	983.7	978.4	961.9	956.4
70°	694.1	672.3	666.8	655.8
72.5°	464.6	464.6	453.6	453.6
75°	284.2	256.9	251.4	256.9
77.5°	196.7	191.2	191.2	185.9
80°	131.2	125.7	136.7	120.2
82.5°	82.0	87.5	82.0	87.5
85°	54.7	65.5	60.2	60.2
87.5°	32.8	32.8	32.8	32.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)