

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: P249549

Luminaire Tested: **LD8B200D010 ER8B200840 8LBDW0MW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249549  
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 ER8B200840 8LBDW0MW  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 4000 CCT WITH MATTE WHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21525.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 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

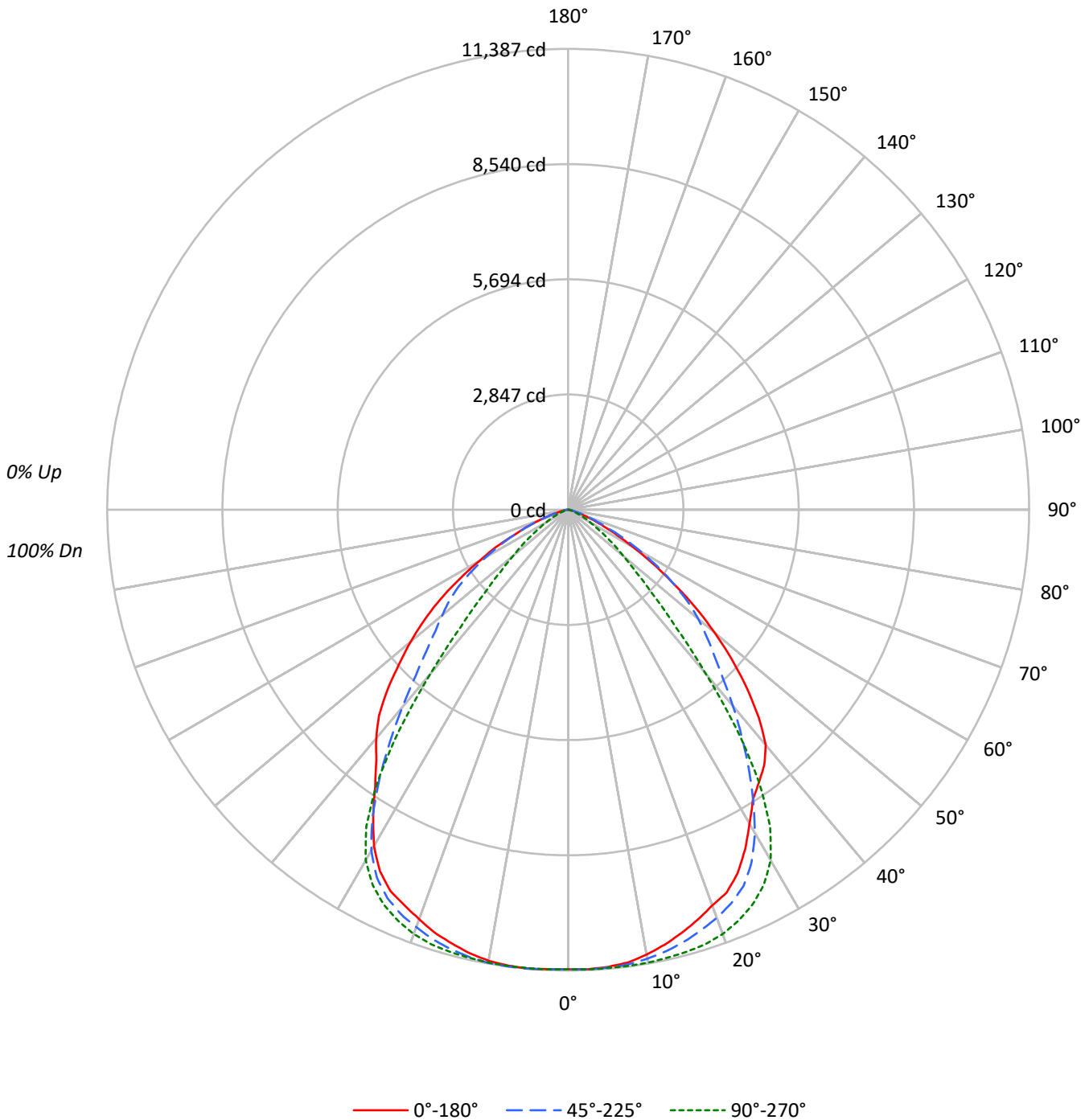
Input Watts (W): 223.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	350208	350208	350208
5°	350979	351923	352304
10°	349502	355802	354277
15°	345629	361004	354195
20°	341480	366081	353280
25°	337046	366501	353643
30°	318865	356199	341657
35°	309345	309571	312786
40°	305511	213000	296925
45°	272226	127871	275946
50°	226355	85104	243903
55°	169768	58670	206799
60°	115044	39094	156026
65°	69397	25355	107193
70°	38480	13740	65952
75°	17431	5814	34134
80°	15148	6482	23813
85°	17266	8598	23740



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1083.9	5.0
10°-20°	3147.7	14.6
20°-30°	4777.6	22.2
30°-40°	5017.9	23.3
40°-50°	3762.1	17.5
50°-60°	2413.9	11.2
60°-70°	1032.6	4.8
70°-80°	244.0	1.1
80°-90°	45.4	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°	9009.2	41.9
0°-40°	14027.1	65.2
0°-60°	20203.1	93.9
0°-90°	21525.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21525.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	11357	11357	11357	11357	11357	
5°	11339	11357	11369	11387	11382	###
15°	10827	11052	11308	11235	11095	3054
25°	9906	10254	10772	10577	10394	4526
35°	8218	7760	8224	8126	8309	5158
45°	6242	5102	2932	4956	6328	4781
55°	3158	3158	1091	3292	3847	2864
65°	951	1122	348	1445	1469	1015
75°	146	171	49	293	286	213
85°	49	30	24	49	67	51
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°	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0
2.5°	11363.1	11375.4	11369.2	11369.2	11363.1	11369.2	11369.2	11381.5	11381.5	11369.2	11363.1
5°	11338.7	11350.9	11350.9	11338.7	11338.7	11369.2	11350.9	11363.1	11363.1	11357.0	11357.0
7.5°	11283.9	11283.9	11308.2	11290.0	11290.0	11308.2	11302.1	11314.4	11326.6	11332.7	11332.7
10°	11161.9	11174.1	11180.3	11180.3	11186.4	11204.6	11216.8	11241.3	11253.3	11265.6	11271.7
12.5°	11009.6	11027.8	11033.9	11027.8	11046.2	11070.5	11101.0	11131.5	11149.8	11174.1	11192.5
15°	10826.6	10826.6	10838.8	10857.2	10869.4	10905.9	10936.4	10972.9	11021.7	11052.3	11082.7
17.5°	10625.5	10637.8	10656.0	10656.0	10680.4	10741.3	10759.6	10814.5	10869.4	10899.8	10960.8
20°	10406.1	10418.2	10436.5	10448.8	10479.2	10528.0	10564.5	10613.3	10674.3	10729.2	10790.1
22.5°	10235.3	10211.0	10223.1	10235.3	10265.9	10308.6	10351.2	10412.1	10473.1	10528.0	10589.0
25°	9906.1	9912.2	9930.6	9942.7	9979.4	10015.9	10064.7	10137.8	10192.7	10253.7	10320.6
27.5°	9461.2	9467.3	9497.7	9497.7	9528.1	9589.2	9619.6	9680.6	9753.8	9814.7	9894.0
30°	8955.2	8967.3	8967.3	8991.8	9010.0	9040.5	9071.0	9132.0	9168.5	9223.4	9333.2
32.5°	8491.9	8504.0	8497.9	8491.9	8473.6	8467.5	8461.3	8473.6	8485.8	8504.0	8546.7
35°	8217.6	8187.0	8162.7	8120.1	8071.3	8010.3	7955.4	7882.3	7815.2	7760.3	7699.4
37.5°	7955.4	7949.3	7912.7	7851.7	7754.2	7644.5	7516.5	7358.0	7199.4	7028.8	6864.3
40°	7589.6	7571.3	7540.9	7455.5	7345.8	7211.7	7041.0	6845.9	6589.8	6327.7	6059.5
42.5°	6967.8	6973.9	6937.4	6870.2	6766.7	6638.6	6461.8	6248.5	5974.2	5663.2	5315.8
45°	6242.4	6242.4	6230.2	6175.3	6102.2	5998.5	5864.4	5687.7	5419.5	5102.4	4730.5
47.5°	5486.5	5492.6	5474.2	5462.1	5431.6	5364.6	5267.0	5132.9	4944.0	4639.1	4267.2
50°	4718.4	4718.4	4748.9	4742.7	4742.7	4718.4	4675.8	4596.4	4431.9	4188.0	3840.6
52.5°	3950.2	3962.5	3980.8	4005.1	4035.6	4084.3	4035.6	3999.0	3895.4	3706.4	3407.7
55°	3157.8	3170.0	3200.4	3243.1	3279.8	3328.5	3340.6	3340.6	3285.7	3157.8	2932.2
57.5°	2481.2	2462.8	2487.3	2523.8	2572.6	2621.4	2657.9	2700.6	2694.5	2609.1	2426.3
60°	1865.4	1871.5	1889.7	1926.4	1963.0	2005.6	2054.4	2090.9	2109.3	2066.6	1950.7
62.5°	1359.5	1359.5	1383.8	1420.3	1438.7	1499.7	1530.1	1548.4	1566.6	1560.5	1487.4
65°	951.1	963.1	975.4	993.7	1011.9	1048.5	1066.8	1103.4	1115.6	1121.7	1066.8
67.5°	670.6	652.3	664.5	676.6	694.9	719.4	755.9	755.9	774.2	774.2	737.6
70°	426.8	426.8	432.9	451.1	463.3	469.4	481.6	493.7	512.1	506.0	506.0
72.5°	286.5	280.4	286.5	292.7	298.8	317.0	317.0	323.1	335.3	341.4	317.0
75°	146.3	152.4	164.5	158.6	176.8	164.5	170.6	189.0	182.9	170.6	170.6
77.5°	121.9	121.9	121.9	115.9	128.0	128.0	121.9	134.1	128.0	128.0	121.9
80°	85.3	91.4	85.3	79.2	85.3	79.2	79.2	79.2	79.2	79.2	73.1
82.5°	67.1	54.9	61.0	54.9	61.0	61.0	54.9	48.8	48.8	54.9	48.8
85°	48.8	36.5	42.7	42.7	36.5	36.5	36.5	36.5	36.5	30.4	30.4
87.5°	30.4	18.3	18.3	18.3	24.3	24.3	24.3	18.3	24.3	24.3	12.2
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°	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0
2.5°	11375.4	11369.2	11381.5	11375.4	11375.4	11369.2	11375.4	11369.2	11381.5	11357.0	11363.1
5°	11375.4	11363.1	11369.2	11375.4	11381.5	11369.2	11369.2	11369.2	11381.5	11369.2	11375.4
7.5°	11350.9	11344.8	11363.1	11375.4	11369.2	11363.1	11375.4	11369.2	11381.5	11375.4	11387.4
10°	11302.1	11308.2	11320.5	11338.7	11344.8	11350.9	11363.1	11363.1	11381.5	11357.0	11369.2
12.5°	11229.0	11253.3	11283.9	11296.0	11320.5	11320.5	11332.7	11338.7	11350.9	11344.8	11363.1
15°	11137.6	11168.0	11204.6	11235.1	11265.6	11283.9	11302.1	11308.2	11326.6	11308.2	11314.4
17.5°	11027.8	11064.4	11119.3	11155.8	11204.6	11222.9	11247.2	11259.5	11277.8	11265.6	11271.7
20°	10875.4	10918.2	10979.0	11033.9	11064.4	11107.0	11137.6	11155.8	11168.0	11155.8	11161.9
22.5°	10662.1	10723.1	10802.3	10844.9	10905.9	10942.5	10948.6	10991.3	11021.7	10991.3	11003.5
25°	10412.1	10473.1	10534.1	10625.5	10680.4	10723.1	10765.7	10771.8	10802.3	10796.2	10790.1
27.5°	9997.6	10076.9	10180.4	10253.7	10326.8	10393.9	10442.7	10454.7	10485.3	10473.1	10479.2
30°	9430.6	9516.1	9613.6	9729.4	9833.0	9900.0	9961.0	10003.7	10034.1	10015.9	10009.8
32.5°	8626.0	8711.3	8815.0	8930.8	9052.8	9150.2	9223.4	9278.3	9314.8	9302.6	9272.2
35°	7705.5	7729.9	7797.0	7888.4	7991.9	8095.6	8162.7	8223.6	8266.2	8278.5	8278.5
37.5°	6760.6	6681.4	6632.6	6632.6	6693.5	6736.1	6797.1	6833.7	6900.8	6925.1	6943.5
40°	5846.1	5663.2	5492.6	5364.6	5279.3	5273.2	5273.2	5291.4	5352.4	5431.6	5504.8
42.5°	5029.3	4736.6	4474.5	4236.8	4066.1	3968.6	3925.9	3932.0	3980.8	4053.9	4175.8
45°	4377.0	4011.3	3682.1	3395.5	3163.9	3011.4	2938.3	2932.2	2968.8	3054.1	3188.3
47.5°	3871.0	3480.8	3109.0	2779.8	2529.9	2365.3	2279.9	2255.6	2279.9	2359.1	2517.7
50°	3450.4	3048.1	2664.0	2322.6	2054.4	1883.8	1804.4	1774.0	1804.4	1871.5	2029.9
52.5°	3060.2	2645.7	2286.0	1956.9	1670.3	1524.0	1438.7	1420.3	1438.7	1517.9	1646.0
55°	2609.1	2255.6	1902.0	1572.8	1322.9	1176.6	1109.5	1091.3	1109.5	1182.7	1316.8
57.5°	2164.2	1859.3	1548.4	1249.7	1036.4	908.2	847.4	822.9	865.6	914.4	1072.9
60°	1749.5	1505.8	1243.6	981.5	804.7	688.8	640.1	633.9	646.2	707.2	816.8
62.5°	1371.7	1170.5	963.1	749.8	603.5	554.7	493.7	487.8	499.8	536.4	621.9
65°	987.6	859.6	701.1	548.6	432.9	365.7	341.4	347.5	359.6	384.1	463.3
67.5°	688.8	597.4	487.8	384.1	298.8	268.2	243.9	237.8	243.9	286.5	329.2
70°	463.3	408.4	329.2	292.7	207.3	164.5	170.6	152.4	176.8	176.8	213.3
72.5°	304.7	268.2	219.4	170.6	146.3	115.9	115.9	109.8	121.9	128.0	158.6
75°	158.6	121.9	121.9	85.3	61.0	30.4	54.9	48.8	42.7	48.8	61.0
77.5°	109.8	91.4	85.3	67.1	61.0	48.8	48.8	48.8	48.8	54.9	61.0
80°	67.1	67.1	48.8	42.7	36.5	30.4	36.5	36.5	36.5	36.5	42.7
82.5°	42.7	36.5	36.5	30.4	30.4	24.3	24.3	24.3	24.3	24.3	36.5
85°	36.5	24.3	24.3	18.3	24.3	42.7	18.3	24.3	24.3	24.3	18.3
87.5°	12.2	18.3	18.3	18.3	12.2	6.1	12.2	18.3	18.3	30.4	24.3
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°	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0	11357.0
2.5°	11375.4	11381.5	11381.5	11375.4	11375.4	11363.1	11387.4	11369.2	11375.4	11399.7	11381.5
5°	11387.4	11393.6	11393.6	11387.4	11387.4	11387.4	11393.6	11393.6	11387.4	11381.5	11393.6
7.5°	11411.9	11405.8	11405.8	11393.6	11393.6	11381.5	11393.6	11375.4	11387.4	11375.4	11393.6
10°	11381.5	11387.4	11381.5	11375.4	11375.4	11369.2	11369.2	11350.9	11357.0	11338.7	11350.9
12.5°	11363.1	11357.0	11357.0	11344.8	11332.7	11320.5	11314.4	11296.0	11296.0	11253.3	11271.7
15°	11314.4	11320.5	11302.1	11277.8	11265.6	11235.1	11222.9	11198.5	11174.1	11143.7	11149.8
17.5°	11271.7	11253.3	11229.0	11204.6	11155.8	11131.5	11107.0	11070.5	11058.2	11021.7	11009.6
20°	11143.7	11131.5	11101.0	11058.2	11027.8	10972.9	10948.6	10912.1	10881.5	10844.9	10826.6
22.5°	10979.0	10966.8	10930.3	10887.6	10838.8	10814.5	10790.1	10723.1	10692.5	10656.0	10649.8
25°	10771.8	10753.5	10717.0	10668.2	10643.7	10576.7	10552.3	10503.5	10491.4	10454.7	10448.8
27.5°	10454.7	10430.4	10387.8	10326.8	10284.1	10241.4	10217.1	10180.4	10168.3	10131.7	10125.7
30°	9979.4	9948.8	9863.5	9839.1	9765.9	9723.2	9723.2	9674.5	9680.6	9656.3	9656.3
32.5°	9229.5	9180.7	9113.6	9064.8	9016.1	8991.8	8991.8	8973.4	8985.6	8985.6	8997.9
35°	8235.8	8168.8	8132.1	8101.7	8101.7	8126.0	8199.3	8217.6	8254.2	8284.6	8309.0
37.5°	6961.7	6955.7	6998.4	7034.9	7126.3	7230.0	7358.0	7467.8	7571.3	7644.5	7717.6
40°	5584.0	5736.5	5858.3	6029.1	6169.2	6370.4	6602.0	6791.0	6967.8	7095.9	7230.0
42.5°	4358.7	4553.8	4809.9	5059.7	5309.7	5584.0	5888.9	6151.0	6382.6	6559.4	6699.6
45°	3395.5	3663.7	3974.7	4291.7	4614.8	4956.2	5273.2	5541.4	5785.2	5968.1	6108.3
47.5°	2737.1	3029.8	3383.3	3730.8	4096.6	4456.2	4809.9	5041.5	5242.6	5388.9	5517.0
50°	2261.6	2572.6	2944.4	3340.6	3706.4	4066.1	4370.9	4596.4	4761.1	4889.1	4968.3
52.5°	1889.7	2218.9	2615.2	3011.4	3377.2	3706.4	3980.8	4151.5	4285.6	4377.0	4450.1
55°	1560.5	1877.6	2249.5	2621.4	2981.0	3291.8	3517.4	3645.5	3749.0	3803.9	3846.6
57.5°	1274.1	1566.6	1908.1	2249.5	2560.4	2816.5	2993.2	3121.2	3170.0	3212.6	3206.5
60°	999.8	1274.1	1585.0	1877.6	2145.8	2353.0	2481.2	2554.2	2590.8	2609.1	2596.9
62.5°	786.4	1036.4	1274.1	1530.1	1725.2	1902.0	2024.0	2024.0	2042.2	2048.3	2066.6
65°	585.2	774.2	981.5	1170.5	1328.9	1444.8	1511.9	1530.1	1554.6	1548.4	1536.2
67.5°	432.9	573.1	725.4	865.6	975.4	1048.5	1097.2	1140.0	1133.9	1121.7	1115.6
70°	298.8	390.2	524.3	609.6	688.8	762.1	774.2	780.3	786.4	792.5	780.3
72.5°	207.3	274.3	347.5	420.6	469.4	499.8	530.4	536.4	536.4	536.4	530.4
75°	103.7	140.2	207.3	237.8	280.4	292.7	317.0	317.0	335.3	310.9	304.7
77.5°	91.4	109.8	146.3	170.6	189.0	207.3	213.3	231.6	225.5	213.3	219.4
80°	54.9	67.1	91.4	103.7	128.0	134.1	140.2	146.3	140.2	146.3	146.3
82.5°	42.7	48.8	61.0	61.0	79.2	79.2	85.3	85.3	91.4	91.4	91.4
85°	24.3	42.7	36.5	73.1	48.8	48.8	61.0	73.1	61.0	61.0	73.1
87.5°	24.3	24.3	18.3	24.3	24.3	24.3	30.4	36.5	36.5	42.7	36.5
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: P249549

CATALOG NUMBER: LD8B200D010 ER8B200840 8LBDW0MW

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	11357.0	11357.0	11357.0	11357.0
2.5°	11375.4	11387.4	11369.2	11363.1
5°	11393.6	11393.6	11381.5	11381.5
7.5°	11393.6	11393.6	11375.4	11363.1
10°	11344.8	11344.8	11326.6	11314.4
12.5°	11253.3	11253.3	11247.2	11229.0
15°	11137.6	11137.6	11113.1	11094.9
17.5°	10979.0	10991.3	10960.8	10960.8
20°	10808.4	10802.3	10778.0	10765.7
22.5°	10631.6	10619.4	10613.3	10576.7
25°	10442.7	10430.4	10412.1	10393.9
27.5°	10119.6	10113.5	10095.1	10070.8
30°	9625.7	9619.6	9595.3	9595.3
32.5°	8985.6	8979.5	8955.2	8961.3
35°	8321.1	8345.6	8333.4	8309.0
37.5°	7766.4	7784.7	7797.0	7784.7
40°	7303.1	7358.0	7364.1	7376.3
42.5°	6809.4	6882.5	6906.9	6919.0
45°	6218.0	6285.1	6340.0	6327.7
47.5°	5614.4	5663.2	5712.0	5675.4
50°	5035.4	5065.8	5084.2	5084.2
52.5°	4486.8	4486.8	4480.7	4486.8
55°	3858.8	3858.8	3834.5	3846.6
57.5°	3200.4	3212.6	3194.3	3163.9
60°	2590.8	2560.4	2548.1	2529.9
62.5°	2017.9	2017.9	1975.2	2029.9
65°	1511.9	1493.6	1475.2	1469.1
67.5°	1097.2	1091.3	1072.9	1066.8
70°	774.2	749.8	743.7	731.5
72.5°	518.2	518.2	506.0	506.0
75°	317.0	286.5	280.4	286.5
77.5°	219.4	213.3	213.3	207.3
80°	146.3	140.2	152.4	134.1
82.5°	91.4	97.6	91.4	97.6
85°	61.0	73.1	67.1	67.1
87.5°	36.5	36.5	36.5	36.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)