

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: P251197

Luminaire Tested: **LD8B70D010 ER8B70827 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P251197
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B70D010 ER8B70827 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7200.0 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

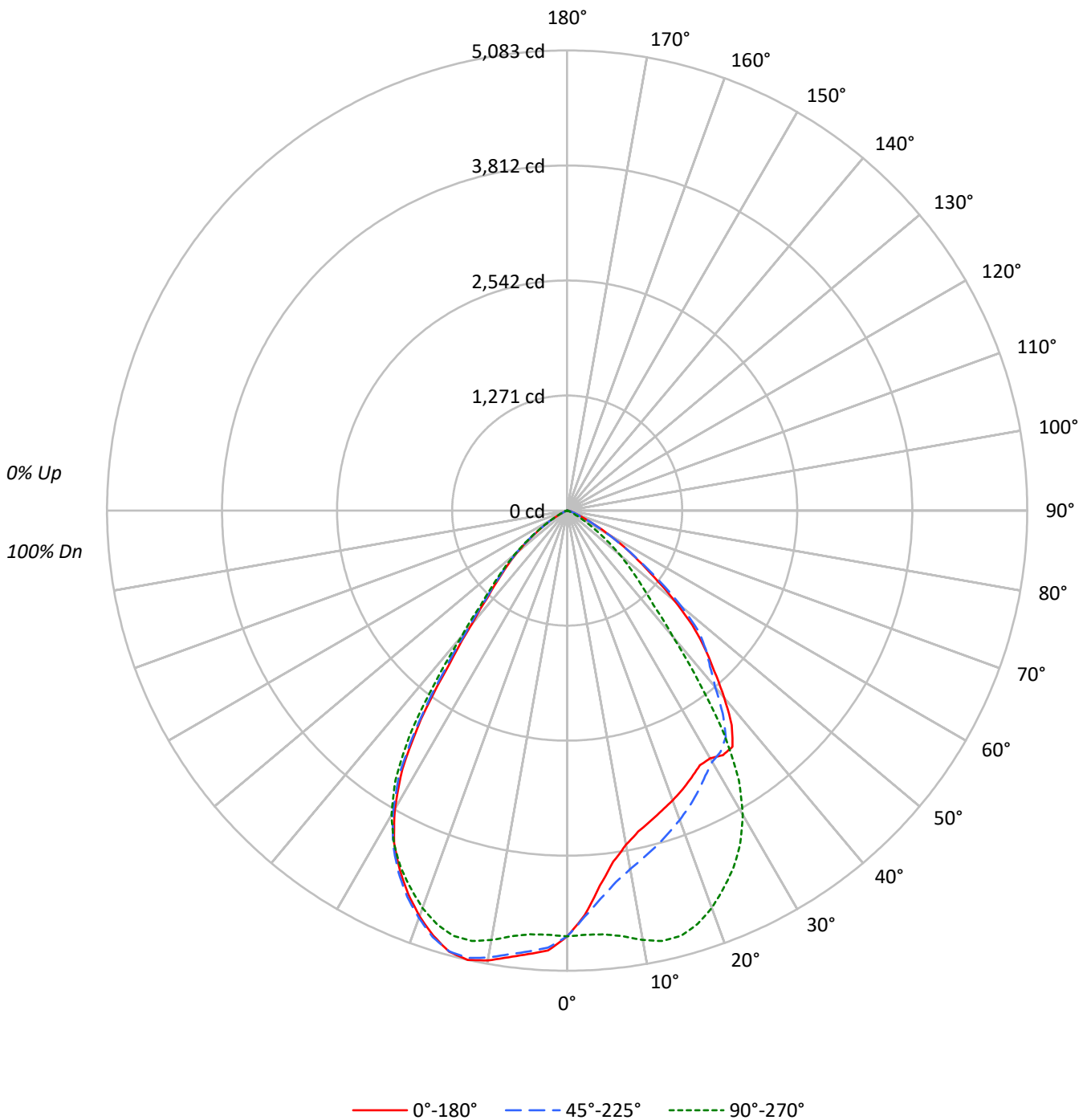
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	145042	145042	145042
5°	128689	145404	152214
10°	117329	150802	157997
15°	113388	155209	161009
20°	111769	153297	156460
25°	110670	148012	148937
30°	112474	138129	135576
35°	119889	114307	106025
40°	108649	73178	66262
45°	93777	50068	46618
50°	73988	36522	34387
55°	51358	22456	21128
60°	32699	11354	10139
65°	16322	4509	3429
70°	9025	2227	1226
75°	6481	1620	584
80°	5274	1101	213
85°	5696	885	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.4	6.1
10°-20°	1266.2	17.6
20°-30°	1837.8	25.5
30°-40°	1810.0	25.1
40°-50°	1134.6	15.8
50°-60°	547.5	7.6
60°-70°	132.5	1.8
70°-80°	26.8	0.4
80°-90°	6.1	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°	3542.4	49.2
0°-40°	5352.4	74.3
0°-60°	7034.6	97.7
0°-90°	7200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7200.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4704	4704	4704	4704	4704	
5°	4157	4298	4697	4888	4917	385
15°	3552	3831	4862	5040	5044	1004
25°	3253	3422	4350	4410	4377	1505
35°	3185	3055	3036	2863	2816	1927
45°	2150	2165	1148	1100	1069	1644
55°	955	986	418	413	393	879
65°	224	221	62	53	47	255
75°	54	47	14	6	5	61
85°	16	12	2	0	0	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6
2.5°	4471.3	4442.9	4389.7	4454.0	4454.0	4418.1	4489.8	4446.6	4481.2	4535.5	4487.3
5°	4157.4	4133.9	4089.4	4157.4	4166.0	4132.7	4219.2	4187.0	4237.7	4304.4	4298.3
7.5°	3909.0	3879.3	3838.5	3909.0	3922.6	3900.3	3983.1	3968.3	4035.0	4121.5	4136.4
10°	3747.1	3716.2	3680.3	3744.6	3754.5	3739.7	3823.7	3815.0	3880.5	3980.6	4020.2
12.5°	3632.1	3606.2	3566.6	3634.6	3645.7	3624.7	3703.8	3700.1	3768.1	3873.1	3922.6
15°	3551.8	3520.9	3485.1	3543.2	3558.0	3534.5	3609.9	3602.5	3671.7	3775.5	3831.1
17.5°	3476.4	3448.0	3410.9	3465.3	3480.1	3455.4	3529.6	3517.2	3576.5	3675.4	3732.2
20°	3406.0	3375.1	3341.7	3397.3	3406.0	3377.6	3451.7	3435.6	3488.8	3580.2	3635.8
22.5°	3333.1	3300.9	3266.3	3320.7	3329.4	3300.9	3368.9	3350.4	3399.8	3482.6	3533.3
25°	3252.7	3223.1	3188.5	3239.1	3246.6	3215.7	3287.3	3263.9	3307.1	3380.0	3422.0
27.5°	3172.4	3144.0	3105.7	3157.6	3161.3	3131.6	3197.1	3165.0	3200.8	3267.6	3303.4
30°	3158.8	3126.7	3087.1	3129.2	3130.4	3092.1	3153.9	3115.6	3135.3	3184.8	3205.8
32.5°	3202.1	3169.9	3129.2	3163.8	3160.0	3118.0	3177.3	3130.4	3136.6	3162.5	3157.6
35°	3184.8	3146.5	3098.3	3135.3	3135.3	3084.7	3144.0	3088.4	3082.2	3085.9	3055.0
37.5°	2988.3	2958.6	2912.9	2948.7	2945.0	2906.7	2952.4	2906.7	2885.7	2877.0	2821.4
40°	2699.1	2663.2	2628.6	2666.9	2670.7	2629.9	2689.2	2637.3	2631.1	2606.4	2540.9
42.5°	2406.2	2393.8	2360.5	2392.6	2409.9	2375.3	2424.7	2400.0	2403.7	2397.5	2335.7
45°	2150.4	2129.4	2104.6	2141.7	2152.8	2135.5	2185.0	2170.1	2185.0	2215.9	2165.2
47.5°	1874.8	1853.8	1826.6	1866.1	1885.9	1853.8	1895.8	1890.8	1913.1	1966.2	1961.3
50°	1542.3	1527.5	1522.6	1527.5	1539.9	1525.0	1554.7	1555.9	1570.8	1643.7	1648.6
52.5°	1221.0	1217.3	1200.0	1216.1	1216.1	1192.6	1222.2	1208.7	1223.5	1272.9	1305.0
55°	955.3	951.6	940.5	955.3	939.2	930.6	939.2	925.6	914.5	952.8	986.2
57.5°	744.0	731.6	718.0	724.2	723.0	704.4	714.3	698.3	689.6	703.2	732.9
60°	530.2	526.5	514.1	520.3	525.2	511.6	521.5	514.1	499.3	510.4	511.6
62.5°	352.2	354.7	347.3	348.5	344.8	342.3	348.5	352.2	348.5	343.6	344.8
65°	223.7	222.5	221.2	222.5	224.9	220.0	223.7	226.2	222.5	222.5	221.2
67.5°	148.3	144.6	140.9	143.4	145.8	142.1	145.8	144.6	145.8	144.6	140.9
70°	100.1	98.9	97.6	98.9	98.9	96.4	98.9	97.6	98.9	97.6	93.9
72.5°	72.9	72.9	71.7	72.9	72.9	70.4	71.7	69.2	70.4	69.2	66.7
75°	54.4	54.4	53.1	54.4	53.1	51.9	53.1	51.9	49.4	49.4	47.0
77.5°	39.5	39.5	39.5	39.5	39.5	38.3	38.3	37.1	35.8	34.6	34.6
80°	29.7	28.4	28.4	28.4	28.4	27.2	28.4	27.2	26.0	24.7	23.5
82.5°	21.0	22.2	21.0	21.0	21.0	19.8	21.0	19.8	19.8	18.5	16.1
85°	16.1	16.1	16.1	16.1	16.1	14.8	14.8	14.8	13.6	13.6	12.4
87.5°	8.7	8.7	8.7	9.9	8.7	8.7	8.7	7.4	7.4	6.2	6.2
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6
2.5°	4551.6	4557.8	4544.2	4565.2	4646.8	4581.3	4608.5	4617.1	4678.9	4690.0	4682.6
5°	4378.6	4405.8	4423.1	4470.0	4560.3	4513.3	4561.5	4592.4	4671.5	4697.4	4703.6
7.5°	4242.6	4299.5	4341.5	4418.1	4524.4	4488.6	4561.5	4612.2	4708.6	4741.9	4758.0
10°	4141.3	4227.8	4300.7	4405.8	4525.7	4502.2	4597.3	4669.0	4776.5	4816.1	4835.8
12.5°	4064.7	4169.7	4267.4	4400.8	4530.6	4519.5	4634.4	4716.0	4829.7	4869.2	4892.7
15°	3980.6	4101.8	4215.5	4365.0	4504.6	4502.2	4625.8	4712.3	4828.4	4861.8	4884.0
17.5°	3880.5	4010.3	4135.1	4297.0	4435.4	4437.9	4562.7	4648.0	4761.7	4788.9	4803.7
20°	3779.2	3907.7	4032.6	4199.4	4335.3	4339.0	4461.4	4540.5	4649.2	4671.5	4675.2
22.5°	3671.7	3791.6	3916.4	4082.0	4213.0	4215.5	4336.6	4410.7	4503.4	4514.5	4524.4
25°	3549.3	3666.7	3784.1	3948.5	4073.3	4080.7	4190.7	4256.2	4341.5	4350.2	4353.9
27.5°	3422.0	3518.4	3630.9	3771.8	3897.8	3892.9	3996.7	4070.9	4147.5	4142.5	4141.3
30°	3293.5	3373.8	3443.1	3579.0	3671.7	3675.4	3773.0	3808.9	3889.2	3879.3	3878.1
32.5°	3203.3	3224.3	3242.8	3312.1	3399.8	3368.9	3435.6	3480.1	3535.7	3532.0	3533.3
35°	3037.7	2999.4	2943.8	2953.7	3006.8	2958.6	2994.4	2993.2	3050.1	3036.5	3052.5
37.5°	2754.7	2645.9	2522.4	2451.9	2461.8	2401.2	2388.9	2418.5	2438.3	2400.0	2413.6
40°	2453.1	2292.5	2099.7	1939.0	1930.4	1855.0	1841.4	1811.7	1850.1	1817.9	1827.8
42.5°	2230.7	2018.1	1764.8	1569.5	1527.5	1464.5	1427.4	1422.5	1433.6	1411.3	1405.2
45°	2060.1	1834.0	1543.6	1319.9	1272.9	1204.9	1167.9	1154.3	1155.5	1148.1	1141.9
47.5°	1859.9	1632.5	1338.4	1109.8	1056.6	992.4	955.3	946.7	951.6	941.7	934.3
50°	1583.1	1379.2	1111.0	902.2	855.2	808.2	778.6	769.9	768.7	761.3	756.3
52.5°	1285.3	1116.0	883.6	709.4	667.4	621.6	600.6	589.5	590.7	583.3	575.9
55°	994.9	889.8	684.7	536.4	498.0	462.2	442.4	428.8	425.1	417.7	414.0
57.5°	740.3	669.8	512.9	386.8	364.6	330.0	310.2	294.1	291.7	288.0	286.7
60°	519.1	468.4	360.9	275.6	249.6	228.6	208.9	192.8	185.4	184.1	180.4
62.5°	336.1	305.3	237.3	184.1	164.4	149.5	129.8	118.6	113.7	108.8	110.0
65°	208.9	185.4	148.3	118.6	107.5	96.4	81.6	71.7	66.7	61.8	63.0
67.5°	129.8	116.2	93.9	76.6	69.2	60.6	49.4	42.0	38.3	34.6	32.1
70°	87.7	75.4	64.3	54.4	49.4	43.3	35.8	29.7	27.2	24.7	22.2
72.5°	61.8	55.6	47.0	40.8	37.1	32.1	27.2	23.5	21.0	18.5	16.1
75°	44.5	39.5	34.6	29.7	27.2	24.7	21.0	18.5	16.1	13.6	11.1
77.5°	32.1	28.4	24.7	22.2	21.0	17.3	14.8	13.6	12.4	9.9	7.4
80°	22.2	19.8	16.1	14.8	14.8	12.4	11.1	9.9	8.7	6.2	4.9
82.5°	14.8	13.6	12.4	11.1	9.9	8.7	8.7	6.2	4.9	3.7	2.5
85°	11.1	9.9	8.7	7.4	7.4	6.2	4.9	3.7	3.7	2.5	1.2
87.5°	6.2	6.2	4.9	3.7	3.7	2.5	2.5	1.2	1.2	1.2	1.2
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6
2.5°	4745.6	4749.3	4770.3	4754.3	4795.1	4824.7	4809.9	4843.3	4832.1	4829.7	4868.0
5°	4777.8	4786.4	4814.8	4800.0	4844.5	4876.6	4861.8	4898.9	4887.8	4885.3	4924.8
7.5°	4839.6	4848.2	4872.9	4860.6	4907.5	4936.0	4917.4	4958.2	4943.4	4942.1	4980.4
10°	4917.4	4929.8	4950.8	4938.4	4981.7	5006.4	4987.9	5027.4	5013.8	5007.6	5049.6
12.5°	4975.5	4984.2	5005.2	4995.3	5037.3	5055.8	5039.8	5078.1	5060.8	5055.8	5092.9
15°	4961.9	4970.6	4987.9	4979.2	5018.8	5036.1	5015.0	5057.1	5039.8	5029.9	5063.2
17.5°	4875.4	4880.3	4892.7	4884.0	4926.1	4937.2	4913.7	4955.7	4939.7	4922.4	4954.5
20°	4748.1	4745.6	4753.0	4749.3	4783.9	4790.1	4775.3	4806.2	4787.7	4777.8	4796.3
22.5°	4589.9	4587.4	4592.4	4582.5	4617.1	4620.8	4598.6	4635.6	4617.1	4598.6	4629.5
25°	4414.4	4400.8	4398.4	4402.1	4425.5	4429.3	4405.8	4433.0	4409.5	4394.7	4424.3
27.5°	4198.2	4180.9	4177.1	4180.9	4204.3	4187.0	4167.3	4187.0	4163.6	4150.0	4168.5
30°	3931.2	3906.5	3895.4	3888.0	3912.7	3906.5	3860.8	3883.0	3845.9	3826.2	3839.8
32.5°	3571.6	3558.0	3528.3	3511.0	3534.5	3487.5	3459.1	3459.1	3444.3	3410.9	3418.3
35°	3072.3	3051.3	3024.1	3009.3	3013.0	2950.0	2903.0	2912.9	2863.4	2854.8	2858.5
37.5°	2440.8	2406.2	2396.3	2365.4	2372.8	2317.2	2252.9	2254.2	2228.2	2201.0	2192.4
40°	1834.0	1827.8	1817.9	1792.0	1801.9	1741.3	1716.6	1717.8	1700.5	1680.7	1690.6
42.5°	1417.5	1397.7	1391.6	1382.9	1385.4	1375.5	1343.4	1347.1	1332.2	1327.3	1322.4
45°	1151.8	1130.8	1116.0	1123.4	1123.4	1112.3	1099.9	1107.3	1099.9	1090.0	1095.0
47.5°	949.1	929.4	921.9	920.7	929.4	921.9	909.6	912.1	910.8	907.1	904.6
50°	757.6	752.6	746.4	742.7	746.4	744.0	732.9	739.0	742.7	730.4	734.1
52.5°	577.1	577.1	575.9	567.3	574.7	567.3	566.0	568.5	564.8	559.8	558.6
55°	422.7	419.0	412.8	411.5	414.0	411.5	409.1	410.3	412.8	400.4	400.4
57.5°	289.2	286.7	283.0	283.0	288.0	281.8	278.1	283.0	278.1	273.1	273.1
60°	185.4	184.1	180.4	180.4	180.4	179.2	175.5	176.7	179.2	171.8	173.0
62.5°	111.2	107.5	106.3	105.0	106.3	105.0	105.0	103.8	102.6	102.6	98.9
65°	60.6	58.1	55.6	56.8	56.8	55.6	55.6	55.6	53.1	51.9	50.7
67.5°	30.9	28.4	28.4	27.2	27.2	27.2	27.2	26.0	26.0	26.0	24.7
70°	19.8	18.5	17.3	17.3	17.3	16.1	16.1	16.1	16.1	16.1	14.8
72.5°	13.6	12.4	11.1	11.1	11.1	9.9	9.9	9.9	9.9	8.7	8.7
75°	9.9	8.7	7.4	7.4	7.4	6.2	6.2	6.2	6.2	6.2	6.2
77.5°	6.2	4.9	4.9	4.9	4.9	3.7	3.7	3.7	3.7	3.7	2.5
80°	3.7	3.7	2.5	2.5	2.5	2.5	1.2	1.2	1.2	1.2	1.2
82.5°	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0
87.5°	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P251197

CATALOG NUMBER: LD8B70D010 ER8B70827 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6	4703.6
2.5°	4854.4	4844.5	4850.7	4896.4	4876.6	4870.5	4818.5	4864.3
5°	4912.5	4905.1	4905.1	4957.0	4933.5	4928.5	4877.9	4917.4
7.5°	4966.8	4959.4	4960.7	5013.8	4995.3	4987.9	4937.2	4976.7
10°	5037.3	5032.3	5033.6	5084.3	5064.5	5057.1	5005.2	5045.9
12.5°	5079.3	5071.9	5071.9	5126.3	5104.0	5092.9	5043.5	5083.0
15°	5047.2	5036.1	5036.1	5090.4	5065.7	5049.6	5006.4	5043.5
17.5°	4937.2	4926.1	4926.1	4973.0	4954.5	4931.0	4886.5	4921.1
20°	4783.9	4770.3	4766.6	4821.0	4795.1	4774.1	4734.5	4767.9
22.5°	4610.9	4604.7	4593.6	4648.0	4624.5	4602.3	4560.3	4586.2
25°	4403.3	4393.4	4382.3	4435.4	4412.0	4389.7	4356.3	4377.4
27.5°	4145.0	4146.2	4140.1	4182.1	4158.6	4146.2	4105.5	4140.1
30°	3832.3	3818.8	3813.8	3863.2	3841.0	3824.9	3774.3	3807.6
32.5°	3424.5	3404.7	3378.8	3434.4	3396.1	3382.5	3339.2	3387.4
35°	2831.3	2825.1	2801.7	2848.6	2827.6	2802.9	2775.7	2816.5
37.5°	2188.7	2193.6	2191.1	2203.5	2191.1	2175.1	2145.4	2130.6
40°	1670.9	1658.5	1648.6	1670.9	1644.9	1644.9	1627.6	1646.1
42.5°	1310.0	1305.0	1317.4	1322.4	1307.5	1305.0	1302.6	1301.3
45°	1081.4	1081.4	1083.8	1088.8	1083.8	1081.4	1073.9	1069.0
47.5°	891.0	896.0	891.0	907.1	898.5	896.0	881.2	887.3
50°	721.7	715.6	721.7	726.7	727.9	720.5	713.1	716.8
52.5°	559.8	549.9	547.5	554.9	549.9	549.9	545.0	543.8
55°	394.2	397.9	391.8	397.9	395.5	391.8	388.1	393.0
57.5°	266.9	268.2	265.7	269.4	263.2	264.5	263.2	262.0
60°	173.0	168.1	168.1	171.8	165.6	165.6	164.4	164.4
62.5°	98.9	97.6	97.6	96.4	95.2	95.2	95.2	92.7
65°	50.7	49.4	48.2	48.2	48.2	48.2	47.0	47.0
67.5°	24.7	23.5	23.5	24.7	23.5	23.5	23.5	23.5
70°	14.8	14.8	13.6	14.8	13.6	13.6	13.6	13.6
72.5°	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
75°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
77.5°	3.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)