

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: P#

Luminaire Tested: **LD4C60D010 EX4C609050 4LBSQLWWH**

Issue Date: 2/18/2022

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P219529)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C60D010 EX4C609050 4LBSQLWWH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBSQLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

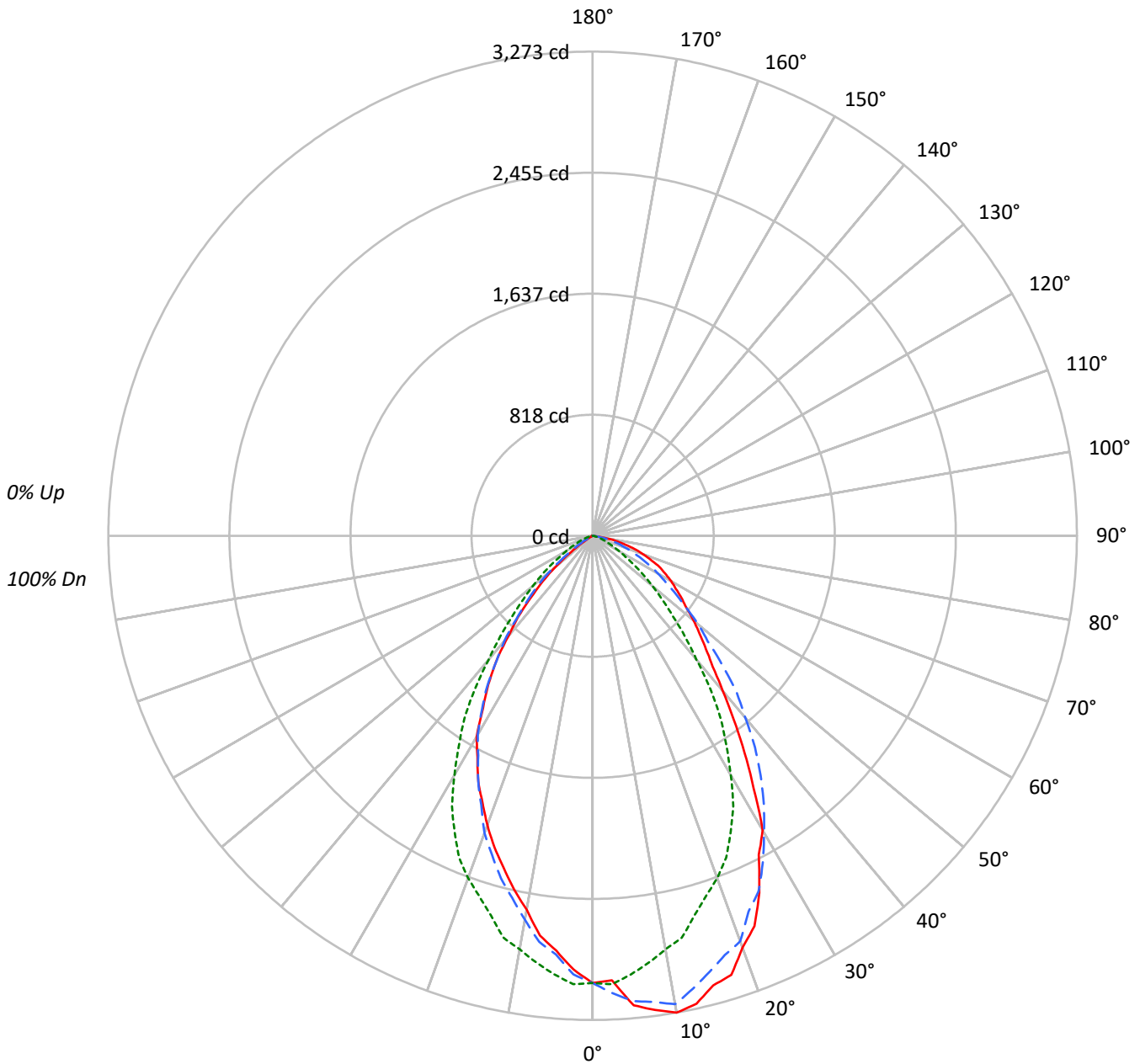
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4333.0 lumens
Efficiency: N/A
Efficacy: 60.2 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
Input Voltage (V):
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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90								
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80								
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72								
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64								
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58								
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	54	53								
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48								
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44								
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41								
10	62	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	291667	291667	291667
5°	308588	288228	272780
10°	320680	278070	251420
15°	314272	265385	232081
20°	304070	252699	213629
25°	283630	234997	194871
30°	256033	207969	174466
35°	210905	178041	144730
40°	172121	137419	111397
45°	147891	104361	80127
50°	133838	79438	50602
55°	123173	57314	18303
60°	118218	39155	2798
65°	114179	26484	845
70°	102238	18394	1044
75°	83806	9469	0
80°	52398	4001	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	6.5
10°-20°	763.0	17.6
20°-30°	1018.9	23.5
30°-40°	967.2	22.3
40°-50°	668.6	15.4
50°-60°	369.4	8.5
60°-70°	183.4	4.2
70°-80°	72.3	1.7
80°-90°	6.9	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°	2065.2	47.7
0°-40°	3032.4	70.0
0°-60°	4070.4	93.9
0°-90°	4333.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4333.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3023	3023	3023	3023	3023	
5°	3186	3157	2976	2842	2816	305
15°	3146	3052	2657	2396	2323	890
25°	2664	2653	2207	1830	1830	1215
35°	1790	1979	1512	1243	1229	1122
45°	1084	1243	765	627	587	845
55°	732	689	341	174	109	659
65°	500	362	116	4	4	485
75°	225	138	25	0	0	240
85°	0	4	0	0	0	21
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°	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8
2.5°	3008.3	3091.7	3098.9	3091.7	3102.6	3098.9	3117.1	3098.9	3120.8	3088.1	3095.4
5°	3186.0	3153.3	3222.2	3186.0	3186.0	3182.4	3171.5	3167.8	3182.4	3135.3	3157.0
7.5°	3233.1	3280.2	3341.9	3265.8	3269.3	3269.3	3247.6	3240.3	3240.3	3153.3	3178.7
10°	3273.0	3243.9	3276.6	3247.6	3273.0	3269.3	3283.8	3236.7	3269.3	3218.6	3214.9
12.5°	3240.3	3229.4	3273.0	3225.9	3211.4	3214.9	3196.9	3186.0	3196.9	3138.8	3135.3
15°	3146.1	3157.0	3222.2	3171.5	3164.2	3157.0	3135.3	3098.9	3128.0	3048.2	3051.9
17.5°	3113.5	3095.4	3106.3	3062.7	3073.6	3066.4	3062.7	3030.2	3022.8	2972.1	2972.1
20°	2961.3	3001.1	3001.1	2972.1	2972.1	2968.6	2921.4	2950.4	2917.7	2903.2	2917.7
22.5°	2856.1	2859.8	2859.8	2834.4	2838.1	2823.6	2798.2	2780.0	2798.2	2780.0	2751.0
25°	2664.1	2671.3	2714.8	2667.7	2660.4	2674.9	2653.2	2642.2	2638.7	2595.2	2653.2
27.5°	2432.1	2504.5	2500.9	2482.8	2504.5	2475.5	2464.7	2468.3	2479.2	2475.5	2490.0
30°	2298.0	2308.8	2319.7	2305.3	2308.8	2298.0	2298.0	2301.6	2330.5	2319.7	2316.1
32.5°	2026.1	2062.3	2091.4	2091.4	2095.0	2105.9	2102.2	2178.3	2196.5	2160.3	2153.0
35°	1790.5	1815.9	1841.2	1844.9	1892.0	1895.6	1899.3	1921.0	1971.7	1982.6	1978.9
37.5°	1565.9	1591.1	1598.4	1631.0	1656.5	1681.7	1710.8	1739.8	1783.3	1819.5	1801.4
40°	1366.5	1377.3	1395.5	1409.9	1460.6	1460.6	1475.1	1533.2	1580.3	1609.3	1605.6
42.5°	1199.8	1203.3	1217.8	1243.2	1290.4	1279.4	1290.4	1330.3	1399.0	1402.7	1442.6
45°	1083.8	1080.1	1091.0	1094.6	1123.7	1138.1	1145.4	1174.4	1232.3	1239.5	1243.2
47.5°	978.7	975.0	993.2	1000.4	1011.2	1025.7	1025.7	1029.4	1051.1	1069.3	1054.8
50°	891.6	891.6	891.6	898.9	917.0	913.4	917.0	931.5	942.3	935.1	931.5
52.5°	797.3	811.8	822.8	826.5	830.0	830.0	833.7	826.5	822.8	811.8	790.1
55°	732.2	746.6	746.6	746.6	746.6	761.1	743.1	746.6	746.6	717.7	688.7
57.5°	667.0	681.5	692.3	677.8	692.3	677.8	670.5	667.0	659.6	630.6	587.2
60°	612.6	619.8	616.1	612.6	619.8	608.9	601.7	587.2	579.9	540.0	511.1
62.5°	551.0	554.5	558.2	551.0	543.7	540.0	525.5	503.8	489.3	456.7	431.3
65°	500.1	489.3	485.6	482.1	474.9	463.9	453.1	427.7	416.8	387.8	362.4
67.5°	424.0	420.5	427.7	416.8	398.7	398.7	387.8	366.1	340.7	322.6	297.2
70°	362.4	358.8	351.6	340.7	337.1	322.6	322.6	297.2	290.0	257.3	235.6
72.5°	297.2	297.2	286.3	275.5	264.6	257.3	253.8	235.6	224.8	206.6	188.4
75°	224.8	224.8	221.1	210.2	202.9	195.7	192.1	177.6	166.7	148.7	137.7
77.5°	159.5	159.5	145.0	137.7	141.3	134.1	126.8	123.3	119.6	108.8	94.3
80°	94.3	90.6	79.8	83.4	79.8	79.8	76.1	72.4	65.2	57.9	50.7
82.5°	25.4	29.0	29.0	29.0	32.7	25.4	25.4	25.4	29.0	29.0	18.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7
87.5°	3.7	7.2	14.5	14.5	14.5	14.5	14.5	10.9	10.9	10.9	7.2
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°	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8
2.5°	3059.2	3055.5	3059.2	3033.7	3091.7	3048.2	3041.0	3033.7	3059.2	3033.7	2997.5
5°	3124.3	3088.1	3077.2	3066.4	3098.9	3048.2	3037.4	3041.0	3022.8	2975.8	2979.3
7.5°	3146.1	3113.5	3080.9	3012.0	3041.0	3030.2	3001.1	2979.3	2950.4	2910.5	2903.2
10°	3153.3	3117.1	3069.9	3048.2	3004.8	2990.3	2979.3	2943.1	2906.9	2838.1	2819.9
12.5°	3131.6	3088.1	3030.2	3012.0	2979.3	2932.2	2906.9	2870.6	2838.1	2783.7	2743.8
15°	3037.4	3001.1	2983.0	2921.4	2906.9	2877.8	2827.1	2776.4	2729.3	2656.7	2635.0
17.5°	2928.7	2914.2	2896.0	2848.8	2845.3	2816.3	2769.2	2725.6	2664.1	2551.6	2515.4
20°	2816.3	2816.3	2758.2	2740.2	2776.4	2718.3	2682.1	2642.2	2515.4	2461.0	2395.9
22.5°	2733.0	2693.1	2660.4	2631.4	2635.0	2598.8	2548.1	2468.3	2421.1	2356.0	2279.8
25°	2569.8	2584.3	2511.9	2500.9	2511.9	2428.4	2403.1	2337.8	2268.9	2207.3	2149.3
27.5°	2468.3	2428.4	2381.4	2341.5	2341.5	2308.8	2236.4	2221.9	2116.7	2058.7	1986.2
30°	2316.1	2287.1	2247.2	2189.2	2182.0	2156.6	2098.6	2062.3	1953.7	1866.6	1826.7
32.5°	2123.9	2113.1	2080.5	2015.3	1993.6	1964.5	1892.0	1830.4	1779.7	1681.7	1634.7
35°	1986.2	1946.4	1877.6	1823.2	1805.0	1754.3	1696.2	1652.8	1598.4	1511.5	1449.8
37.5°	1779.7	1739.8	1674.5	1609.3	1609.3	1558.6	1478.8	1435.4	1359.2	1308.4	1257.7
40°	1598.4	1547.7	1482.5	1406.4	1395.5	1322.9	1290.4	1217.8	1170.7	1091.0	1083.8
42.5°	1395.5	1348.3	1290.4	1232.3	1188.8	1152.6	1069.3	1014.9	964.2	924.3	913.4
45°	1210.6	1148.9	1098.2	1025.7	982.2	938.8	884.4	848.2	808.3	764.8	739.4
47.5°	1051.1	1000.4	927.8	862.7	819.2	797.3	735.7	696.0	663.3	634.3	616.1
50°	888.1	826.5	786.5	714.0	706.7	656.0	605.4	572.7	554.5	529.2	503.8
52.5°	764.8	706.7	652.4	598.1	569.0	551.0	503.8	471.2	445.9	427.7	413.2
55°	645.1	594.4	551.0	496.6	478.4	453.1	398.7	391.5	366.1	340.7	322.6
57.5°	554.5	507.4	456.7	420.5	387.8	369.8	326.2	297.2	282.7	261.0	242.8
60°	471.2	420.5	380.6	337.1	322.6	297.2	264.6	239.3	221.1	202.9	184.9
62.5°	395.1	351.6	308.1	271.8	250.1	235.6	210.2	188.4	170.4	155.9	141.3
65°	326.2	286.3	250.1	213.9	202.9	184.9	166.7	148.7	134.1	116.0	101.5
67.5°	268.2	232.0	195.7	170.4	159.5	152.2	130.5	112.3	101.5	90.6	76.1
70°	210.2	184.9	155.9	134.1	123.3	112.3	97.8	87.0	72.4	65.2	54.4
72.5°	163.2	141.3	116.0	97.8	90.6	83.4	68.9	57.9	50.7	43.5	36.2
75°	116.0	97.8	83.4	65.2	61.6	57.9	47.1	39.9	32.7	25.4	21.7
77.5°	79.8	65.2	50.7	43.5	39.9	32.7	29.0	21.7	18.2	14.5	10.9
80°	43.5	32.7	25.4	21.7	18.2	14.5	14.5	10.9	7.2	7.2	3.7
82.5°	14.5	10.9	7.2	3.7	3.7	3.7	3.7	3.7	3.7	0.0	3.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	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: P#

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8
2.5°	3019.2	2979.3	2990.3	2990.3	2983.0	2983.0	2975.8	2964.9	2968.6	2946.7	2899.7
5°	2986.6	2935.9	2928.7	2935.9	2906.9	2899.7	2885.2	2906.9	2841.6	2867.0	2838.1
7.5°	2892.4	2845.3	2834.4	2859.8	2823.6	2801.7	2798.2	2827.1	2769.2	2740.2	2707.6
10°	2787.2	2769.2	2736.5	2718.3	2707.6	2711.1	2682.1	2645.9	2635.0	2627.7	2598.8
12.5°	2693.1	2653.2	2624.2	2602.5	2595.2	2595.2	2548.1	2540.8	2508.2	2500.9	2457.5
15°	2580.6	2533.6	2515.4	2486.5	2461.0	2475.5	2421.1	2406.7	2395.9	2348.7	2356.0
17.5°	2482.8	2432.1	2388.6	2370.4	2348.7	2327.0	2276.2	2287.1	2261.7	2261.7	2196.5
20°	2356.0	2301.6	2268.9	2232.7	2232.7	2203.7	2167.5	2171.1	2138.4	2105.9	2047.8
22.5°	2221.9	2163.8	2123.9	2109.4	2073.2	2066.0	2022.5	2011.6	1968.1	1971.7	1921.0
25°	2080.5	2022.5	1968.1	1971.7	1939.2	1924.7	1899.3	1848.6	1830.4	1808.7	1794.2
27.5°	1913.8	1873.9	1826.7	1823.2	1761.5	1765.1	1732.6	1718.1	1674.5	1685.4	1652.8
30°	1761.5	1703.6	1660.0	1649.2	1623.8	1616.6	1565.9	1544.0	1551.4	1522.3	1504.2
32.5°	1605.6	1518.7	1500.5	1478.8	1464.3	1446.1	1409.9	1424.4	1391.8	1399.0	1370.0
35°	1399.0	1362.8	1315.6	1315.6	1301.2	1286.7	1261.4	1275.9	1243.2	1228.7	1199.8
37.5°	1225.1	1192.5	1145.4	1159.9	1134.5	1112.7	1091.0	1094.6	1065.6	1062.0	1032.9
40°	1036.6	1018.4	985.9	985.9	967.7	967.7	956.8	946.0	927.8	906.1	873.5
42.5°	859.0	844.5	830.0	833.7	808.3	830.0	801.0	819.2	761.1	757.6	735.7
45°	728.5	696.0	699.5	685.0	670.5	677.8	652.4	659.6	627.1	619.8	598.1
47.5°	590.9	579.9	558.2	551.0	551.0	540.0	529.2	525.5	511.1	492.9	463.9
50°	485.6	445.9	438.5	427.7	420.5	420.5	406.0	384.3	387.8	369.8	340.7
52.5°	380.6	347.9	333.4	329.9	315.4	308.1	290.0	275.5	264.6	257.3	239.3
55°	293.5	264.6	246.5	246.5	224.8	224.8	199.4	188.4	174.0	159.5	148.7
57.5°	221.1	206.6	188.4	174.0	166.7	148.7	134.1	116.0	105.1	83.4	68.9
60°	166.7	152.2	134.1	123.3	116.0	97.8	79.8	65.2	39.9	32.7	29.0
62.5°	123.3	108.8	90.6	83.4	76.1	61.6	43.5	21.7	10.9	10.9	10.9
65°	90.6	72.4	57.9	50.7	43.5	32.7	14.5	7.2	3.7	3.7	3.7
67.5°	61.6	47.1	32.7	29.0	21.7	10.9	3.7	3.7	3.7	3.7	3.7
70°	39.9	29.0	14.5	10.9	7.2	3.7	3.7	3.7	3.7	3.7	3.7
72.5°	25.4	14.5	7.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	14.5	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	3.7	3.7
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: P#

CATALOG NUMBER: LD4C60D010 EX4C609050 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8	3022.8
2.5°	2950.4	2925.0	2939.4	2906.9	2921.4	2946.7	2928.7	2935.9
5°	2848.8	2834.4	2816.3	2769.2	2805.4	2834.4	2819.9	2816.3
7.5°	2740.2	2689.4	2714.8	2700.3	2693.1	2722.0	2689.4	2725.6
10°	2627.7	2591.5	2588.0	2562.6	2562.6	2584.3	2588.0	2566.1
12.5°	2461.0	2443.0	2443.0	2439.3	2435.6	2457.5	2461.0	2450.2
15°	2341.5	2334.2	2316.1	2312.5	2290.8	2323.3	2327.0	2323.3
17.5°	2196.5	2200.0	2182.0	2182.0	2196.5	2207.3	2178.3	2207.3
20°	2098.6	2080.5	2073.2	2040.6	2058.7	2076.9	2076.9	2080.5
22.5°	1957.2	1928.2	1939.2	1921.0	1910.1	1935.5	1935.5	1946.4
25°	1797.7	1797.7	1805.0	1794.2	1801.4	1815.9	1805.0	1830.4
27.5°	1645.5	1660.0	1660.0	1645.5	1652.8	1696.2	1714.4	1685.4
30°	1504.2	1507.8	1518.7	1511.5	1533.2	1547.7	1544.0	1565.9
32.5°	1344.8	1362.8	1370.0	1359.2	1366.5	1399.0	1381.0	1377.3
35°	1221.5	1188.8	1185.3	1188.8	1203.3	1210.6	1203.3	1228.7
37.5°	1043.9	1032.9	1018.4	1022.1	1032.9	1047.5	1054.8	1072.8
40°	873.5	859.0	859.0	855.4	844.5	884.4	884.4	884.4
42.5°	724.9	721.2	703.2	703.2	717.7	728.5	721.2	746.6
45°	594.4	579.9	569.0	569.0	579.9	579.9	590.9	587.2
47.5°	467.6	453.1	456.7	445.9	456.7	471.2	453.1	456.7
50°	351.6	351.6	344.4	351.6	347.9	351.6	344.4	337.1
52.5°	239.3	271.8	275.5	261.0	228.3	199.4	181.2	195.7
55°	137.7	123.3	123.3	119.6	112.3	108.8	97.8	108.8
57.5°	68.9	61.6	61.6	61.6	57.9	54.4	47.1	47.1
60°	29.0	25.4	25.4	21.7	18.2	14.5	10.9	14.5
62.5°	10.9	7.2	7.2	7.2	7.2	7.2	7.2	7.2
65°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
67.5°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
70°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)