

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252288

Luminaire Tested: **LE_6B40D010 EC6B30508050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252288
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30508050 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4996.2 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

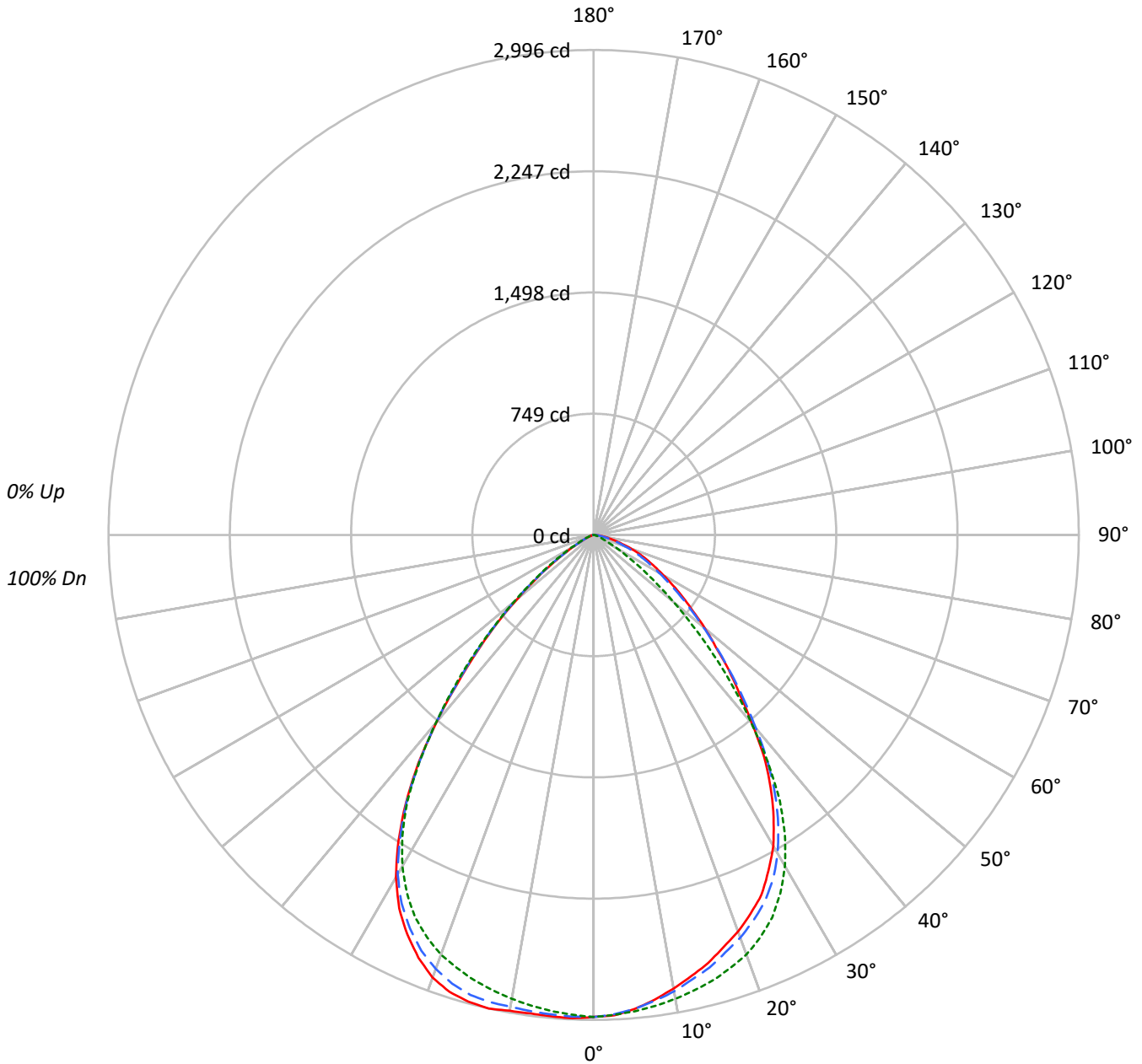
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64				64
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58				58
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47				47
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43				43
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40				40
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	194293	194293	194293
5°	192442	193385	195500
10°	188473	192766	197761
15°	184869	192400	201627
20°	181039	191523	202021
25°	176579	187708	196001
30°	167172	178013	183972
35°	151818	159559	160993
40°	129571	128958	128345
45°	108853	96564	93574
50°	90900	65343	62065
55°	76504	40095	36409
60°	64771	21125	18293
65°	56068	11099	8876
70°	46658	6867	4788
75°	34433	4537	2722
80°	27013	2705	1353
85°	21558	2695	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.7	5.6
10°-20°	803.6	16.1
20°-30°	1186.7	23.8
30°-40°	1223.0	24.5
40°-50°	844.7	16.9
50°-60°	416.3	8.3
60°-70°	168.7	3.4
70°-80°	60.1	1.2
80°-90°	12.4	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°	2271.0	45.5
0°-40°	3493.9	69.9
0°-60°	4755.0	95.2
0°-90°	4996.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4996.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2978	2978	2978	2978	2978	
5°	2938	2938	2953	2974	2985	278
15°	2737	2766	2849	2942	2985	771
25°	2453	2500	2608	2683	2723	1121
35°	1906	1953	2003	2014	2021	1181
45°	1180	1187	1047	1032	1014	912
55°	673	647	352	331	320	608
65°	363	327	72	58	58	361
75°	137	115	18	11	11	153
85°	29	22	4	0	0	35
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°	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1
2.5°	2970.9	2960.1	2967.2	2952.9	2970.9	2952.9	2956.5	2960.1	2956.5	2960.1	2963.6
5°	2938.5	2927.8	2938.5	2920.5	2938.5	2927.8	2927.8	2931.4	2931.4	2934.9	2938.5
7.5°	2895.4	2884.5	2895.4	2877.4	2899.0	2888.1	2888.1	2895.4	2891.8	2895.4	2902.5
10°	2845.0	2830.6	2841.4	2830.6	2852.2	2837.8	2845.0	2845.0	2845.0	2855.8	2863.0
12.5°	2791.0	2776.6	2791.0	2773.0	2794.6	2783.9	2787.5	2798.2	2801.9	2809.0	2812.6
15°	2737.1	2719.1	2726.2	2715.5	2737.1	2726.2	2729.9	2744.2	2744.2	2755.1	2765.9
17.5°	2668.8	2654.4	2668.8	2654.4	2672.4	2665.1	2672.4	2683.1	2683.1	2693.9	2704.8
20°	2607.6	2593.2	2604.0	2593.2	2614.8	2604.0	2607.6	2622.0	2625.6	2636.4	2647.1
22.5°	2532.1	2521.2	2528.5	2517.8	2539.2	2532.1	2535.6	2550.1	2553.6	2560.9	2578.9
25°	2453.0	2431.4	2442.1	2435.0	2456.5	2445.8	2453.0	2467.4	2474.5	2485.4	2499.8
27.5°	2337.9	2327.1	2334.2	2334.2	2352.2	2341.5	2345.0	2359.5	2370.2	2381.0	2399.0
30°	2219.1	2201.1	2208.4	2212.0	2226.4	2219.1	2226.4	2240.8	2244.4	2258.8	2273.1
32.5°	2068.1	2060.9	2075.2	2068.1	2075.2	2075.2	2078.9	2089.6	2096.9	2104.1	2122.0
35°	1906.2	1891.9	1906.2	1899.0	1917.0	1906.2	1917.0	1927.9	1927.9	1942.2	1953.0
37.5°	1730.0	1712.0	1719.2	1719.2	1726.4	1722.9	1722.9	1740.8	1744.4	1755.2	1766.0
40°	1521.4	1514.2	1528.6	1525.0	1528.6	1528.6	1532.2	1543.0	1550.1	1553.8	1557.4
42.5°	1334.4	1338.0	1341.6	1341.6	1341.6	1341.6	1341.6	1356.0	1352.4	1363.1	1366.8
45°	1179.8	1165.4	1172.5	1168.9	1179.8	1168.9	1179.8	1190.5	1183.4	1194.1	1186.9
47.5°	1021.5	1021.5	1021.5	1017.9	1025.0	1021.5	1028.6	1032.2	1032.2	1032.2	1028.6
50°	895.6	884.8	888.4	888.4	892.0	888.4	895.6	899.1	899.1	892.0	877.6
52.5°	773.2	769.8	769.8	776.9	776.9	773.2	773.2	773.2	773.2	762.5	755.2
55°	672.6	665.4	669.0	669.0	669.0	669.0	672.6	669.0	669.0	658.2	647.4
57.5°	582.6	575.5	575.5	575.5	579.1	575.5	575.5	575.5	571.9	561.1	546.8
60°	496.4	492.8	496.4	496.4	500.0	496.4	496.4	496.4	489.1	478.4	464.0
62.5°	424.4	424.4	424.4	428.0	428.0	424.4	424.4	420.9	417.2	402.9	388.5
65°	363.2	359.6	363.2	363.2	366.9	366.9	363.2	359.6	356.1	341.6	327.2
67.5°	302.1	298.5	302.1	302.1	305.8	302.1	302.1	302.1	291.4	284.1	269.8
70°	244.6	241.0	241.0	241.0	244.6	237.4	241.0	241.0	233.8	223.0	208.6
72.5°	187.0	187.0	187.0	187.0	187.0	187.0	183.4	183.4	176.2	165.5	158.2
75°	136.6	136.6	140.2	140.2	136.6	136.6	136.6	133.1	129.5	122.2	115.1
77.5°	100.8	100.8	100.8	100.8	97.1	97.1	97.1	93.5	89.9	86.4	79.1
80°	71.9	71.9	71.9	68.4	71.9	68.4	68.4	68.4	61.1	57.5	54.0
82.5°	50.4	46.8	46.8	46.8	46.8	46.8	46.8	43.1	43.1	39.6	36.0
85°	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8	25.1	21.6	21.6
87.5°	14.4	18.0	18.0	18.0	18.0	18.0	18.0	14.4	14.4	14.4	10.8
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1
2.5°	2963.6	2963.6	2970.9	2960.1	2978.1	2967.2	2963.6	2981.6	2970.9	2967.2	2974.5
5°	2938.5	2942.1	2945.8	2938.5	2956.5	2945.8	2945.8	2963.6	2956.5	2952.9	2963.6
7.5°	2906.1	2909.8	2916.9	2913.4	2927.8	2920.5	2924.1	2942.1	2934.9	2934.9	2945.8
10°	2866.6	2873.8	2881.0	2881.0	2899.0	2891.8	2891.8	2913.4	2906.1	2909.8	2924.1
12.5°	2819.9	2830.6	2841.4	2845.0	2863.0	2852.2	2855.8	2881.0	2877.4	2881.0	2895.4
15°	2769.5	2783.9	2794.6	2794.6	2816.2	2805.4	2816.2	2841.4	2834.2	2848.6	2866.6
17.5°	2711.9	2726.2	2740.8	2744.2	2765.9	2758.6	2773.0	2798.2	2798.2	2805.4	2827.0
20°	2658.0	2676.0	2683.1	2693.9	2715.5	2711.9	2719.1	2747.9	2747.9	2758.6	2780.2
22.5°	2586.0	2604.0	2618.4	2629.2	2647.1	2647.1	2658.0	2683.1	2683.1	2690.4	2711.9
25°	2506.9	2528.5	2539.2	2550.1	2568.0	2564.5	2575.2	2596.9	2600.4	2607.6	2629.2
27.5°	2406.2	2424.1	2438.6	2445.8	2470.9	2456.5	2467.4	2492.5	2488.9	2496.1	2514.1
30°	2280.2	2298.2	2312.6	2312.6	2334.2	2334.2	2345.0	2355.9	2355.9	2363.0	2377.4
32.5°	2132.9	2154.4	2154.4	2165.2	2179.6	2165.2	2179.6	2194.0	2186.8	2197.6	2208.4
35°	1963.8	1974.6	1978.2	1978.2	1989.0	1985.4	1981.8	1992.6	1985.4	2003.4	2014.1
37.5°	1758.8	1773.1	1766.0	1773.1	1769.6	1758.8	1758.8	1776.8	1762.4	1766.0	1776.8
40°	1561.0	1561.0	1557.4	1539.4	1543.0	1532.2	1528.6	1532.2	1517.8	1514.2	1528.6
42.5°	1356.0	1352.4	1341.6	1316.4	1320.0	1302.0	1287.6	1287.6	1280.4	1276.9	1280.4
45°	1172.5	1161.8	1143.8	1115.0	1107.8	1093.4	1064.6	1057.4	1046.6	1046.6	1050.2
47.5°	1003.5	989.1	960.4	928.0	910.0	892.0	863.2	852.4	834.4	827.2	834.4
50°	863.2	838.0	802.1	755.2	737.4	715.8	687.0	669.0	651.0	643.8	640.2
52.5°	733.8	697.8	661.8	604.2	589.9	568.2	528.8	510.8	492.8	478.4	478.4
55°	622.2	589.9	539.5	485.5	464.0	442.4	402.9	377.6	359.6	352.5	345.2
57.5°	521.5	485.5	438.8	381.2	359.6	338.1	298.5	273.4	255.4	244.6	237.4
60°	438.8	399.2	352.5	302.1	277.0	255.4	215.8	190.6	172.6	161.9	154.6
62.5°	359.6	327.2	280.5	233.8	212.2	190.6	158.2	133.1	115.1	107.9	97.1
65°	302.1	269.8	226.6	187.0	169.0	147.5	118.8	97.1	82.8	71.9	64.8
67.5°	244.6	219.4	183.4	147.5	129.5	115.1	89.9	71.9	57.5	50.4	46.8
70°	194.2	169.0	140.2	111.5	100.8	86.4	68.4	50.4	43.1	36.0	32.4
72.5°	143.9	125.9	104.2	82.8	71.9	64.8	46.8	39.6	28.8	25.1	21.6
75°	104.2	89.9	75.5	57.5	50.4	46.8	36.0	25.1	21.6	18.0	14.4
77.5°	71.9	64.8	50.4	39.6	36.0	32.4	25.1	18.0	14.4	10.8	10.8
80°	46.8	39.6	32.4	25.1	25.1	21.6	14.4	10.8	10.8	7.2	7.2
82.5°	28.8	25.1	21.6	18.0	14.4	14.4	10.8	7.2	7.2	3.6	3.6
85°	18.0	14.4	10.8	10.8	7.2	7.2	7.2	3.6	3.6	3.6	3.6
87.5°	7.2	7.2	7.2	3.6	3.6	3.6	3.6	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1
2.5°	2974.5	2974.5	2981.6	2970.9	2978.1	2978.1	2985.2	2970.9	2978.1	2981.6	2988.9
5°	2960.1	2963.6	2970.9	2967.2	2970.9	2970.9	2978.1	2960.1	2974.5	2974.5	2985.2
7.5°	2945.8	2945.8	2952.9	2949.2	2956.5	2960.1	2967.2	2952.9	2967.2	2967.2	2978.1
10°	2927.8	2927.8	2938.5	2934.9	2945.8	2949.2	2960.1	2945.8	2960.1	2963.6	2974.5
12.5°	2902.5	2906.1	2916.9	2916.9	2927.8	2934.9	2945.8	2938.5	2956.5	2960.1	2974.5
15°	2873.8	2881.0	2895.4	2891.8	2902.5	2913.4	2927.8	2916.9	2942.1	2949.2	2963.6
17.5°	2837.8	2845.0	2855.8	2855.8	2866.6	2873.8	2891.8	2884.5	2906.1	2909.8	2927.8
20°	2783.9	2794.6	2809.0	2805.4	2816.2	2823.4	2837.8	2830.6	2852.2	2859.4	2877.4
22.5°	2719.1	2726.2	2737.1	2737.1	2747.9	2755.1	2769.5	2758.6	2780.2	2783.9	2798.2
25°	2632.8	2640.0	2647.1	2650.8	2661.5	2665.1	2672.4	2665.1	2683.1	2686.8	2704.8
27.5°	2521.2	2524.9	2535.6	2535.6	2542.9	2546.5	2557.2	2542.9	2568.0	2568.0	2578.9
30°	2388.2	2384.6	2399.0	2391.8	2399.0	2399.0	2409.8	2402.6	2420.6	2413.4	2424.1
32.5°	2212.0	2219.1	2219.1	2212.0	2226.4	2222.8	2222.8	2215.6	2226.4	2230.0	2237.1
35°	2007.0	2017.8	2017.8	2021.4	2025.0	2014.1	2017.8	1996.1	2014.1	2017.8	2021.4
37.5°	1784.0	1773.1	1780.4	1769.6	1787.6	1766.0	1766.0	1751.6	1766.0	1766.0	1769.6
40°	1528.6	1525.0	1532.2	1525.0	1521.4	1517.8	1510.6	1499.9	1514.2	1507.0	1517.8
42.5°	1287.6	1284.0	1284.0	1276.9	1273.2	1273.2	1266.0	1258.9	1255.2	1255.2	1273.2
45°	1039.5	1046.6	1039.5	1035.9	1043.0	1035.9	1039.5	1025.0	1032.2	1025.0	1032.2
47.5°	830.9	834.4	827.2	820.0	830.9	820.0	820.0	809.2	823.6	823.6	816.5
50°	643.8	640.2	633.0	640.2	636.6	636.6	636.6	625.9	633.0	622.2	629.4
52.5°	474.8	471.1	471.1	467.6	471.1	467.6	467.6	464.0	464.0	460.4	464.0
55°	345.2	341.6	334.5	334.5	334.5	338.1	334.5	330.9	330.9	327.2	330.9
57.5°	233.8	226.6	226.6	226.6	226.6	223.0	223.0	219.4	223.0	219.4	223.0
60°	151.0	151.0	143.9	143.9	143.9	143.9	143.9	140.2	143.9	143.9	143.9
62.5°	93.5	93.5	89.9	86.4	89.9	86.4	86.4	86.4	89.9	86.4	89.9
65°	61.1	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
67.5°	43.1	39.6	39.6	39.6	39.6	39.6	39.6	36.0	39.6	39.6	39.6
70°	28.8	28.8	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
72.5°	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
75°	14.4	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
77.5°	10.8	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
80°	7.2	7.2	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
85°	3.6	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	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
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: P252288

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1	2978.1
2.5°	2978.1	2981.6	2974.5	2978.1	2970.9	2978.1	2981.6	2988.9
5°	2970.9	2974.5	2967.2	2974.5	2967.2	2974.5	2978.1	2985.2
7.5°	2963.6	2970.9	2963.6	2970.9	2963.6	2970.9	2974.5	2981.6
10°	2963.6	2974.5	2967.2	2978.1	2967.2	2974.5	2981.6	2985.2
12.5°	2963.6	2974.5	2970.9	2978.1	2974.5	2981.6	2988.9	2996.0
15°	2956.5	2967.2	2960.1	2970.9	2967.2	2970.9	2985.2	2985.2
17.5°	2916.9	2927.8	2927.8	2934.9	2934.9	2945.8	2952.9	2960.1
20°	2866.6	2877.4	2873.8	2884.5	2884.5	2895.4	2902.5	2909.8
22.5°	2791.0	2805.4	2801.9	2812.6	2809.0	2816.2	2830.6	2827.0
25°	2693.9	2711.9	2708.4	2715.5	2711.9	2711.9	2719.1	2722.8
27.5°	2575.2	2586.0	2582.4	2589.6	2582.4	2589.6	2596.9	2600.4
30°	2420.6	2427.8	2424.1	2427.8	2424.1	2431.4	2435.0	2442.1
32.5°	2233.5	2244.4	2233.5	2240.8	2237.1	2237.1	2251.5	2244.4
35°	2010.5	2014.1	2017.8	2017.8	2010.5	2014.1	2021.4	2021.4
37.5°	1762.4	1780.4	1758.8	1769.6	1766.0	1766.0	1766.0	1776.8
40°	1503.4	1507.0	1499.9	1499.9	1499.9	1496.2	1510.6	1507.0
42.5°	1258.9	1262.5	1258.9	1248.0	1251.6	1251.6	1262.5	1248.0
45°	1021.5	1028.6	1025.0	1025.0	1017.9	1017.9	1021.5	1014.2
47.5°	809.2	816.5	805.6	809.2	802.1	809.2	805.6	812.9
50°	615.0	622.2	618.6	622.2	622.2	615.0	625.9	611.5
52.5°	460.4	464.0	460.4	456.8	453.1	453.1	460.4	456.8
55°	327.2	323.8	323.8	323.8	327.2	327.2	323.8	320.1
57.5°	219.4	219.4	215.8	215.8	219.4	212.2	215.8	212.2
60°	140.2	140.2	140.2	140.2	136.6	140.2	140.2	140.2
62.5°	86.4	86.4	86.4	86.4	86.4	86.4	86.4	86.4
65°	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
67.5°	36.0	39.6	39.6	39.6	36.0	36.0	36.0	36.0
70°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
72.5°	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
75°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
77.5°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	3.6	3.6	3.6	3.6	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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













(END OF REPORT)