

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: P252733

Luminaire Tested: **LE_6B60D010R EC6B60709030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252733
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B60D010R EC6B60709030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5951.3 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

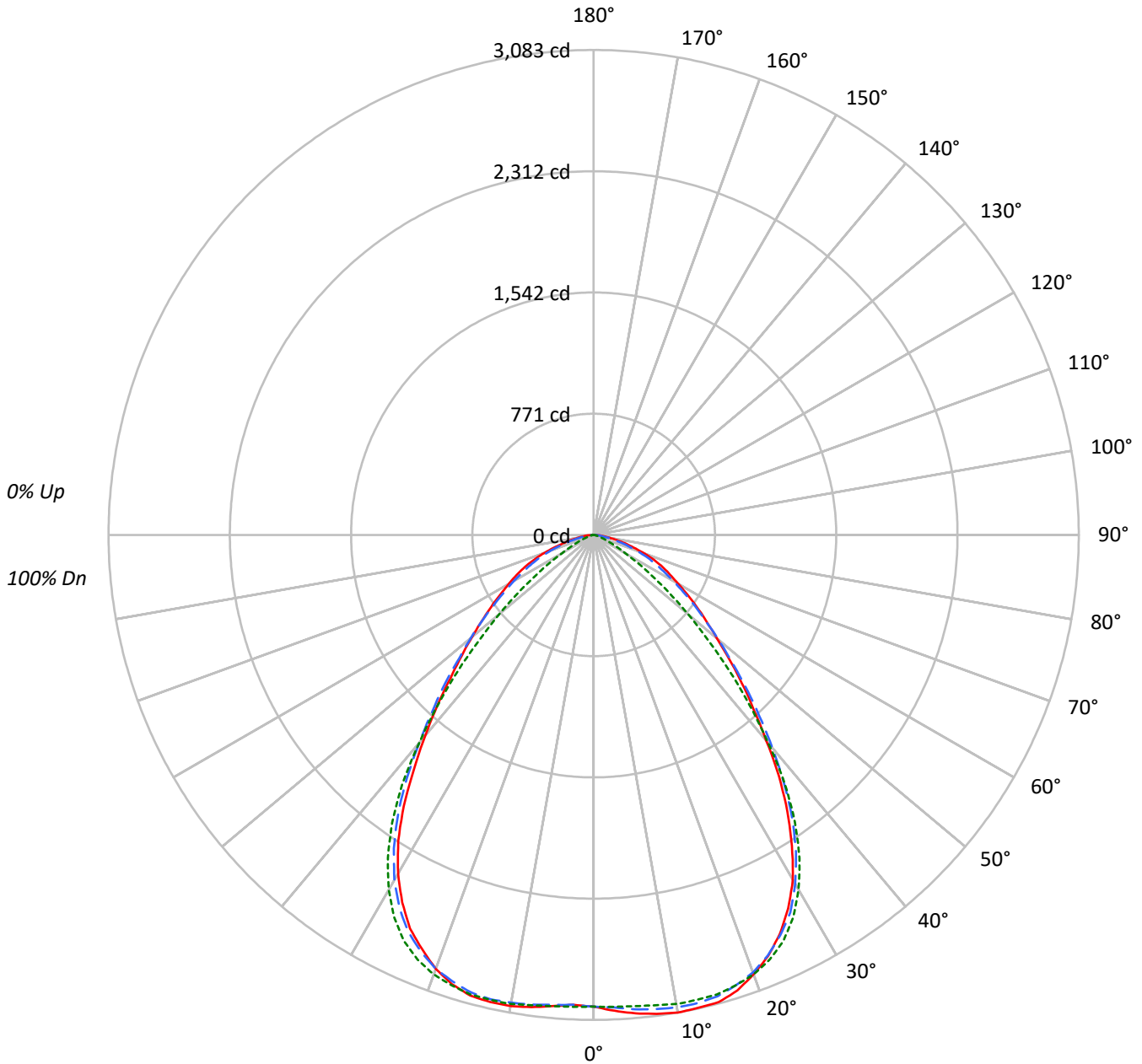
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100								
1	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89								
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78								
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68								
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61								
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54								
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48								
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44								
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40								
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36								
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	195617	195617	195617
5°	199973	196921	196921
10°	204246	200596	201444
15°	207678	204240	204801
20°	206401	206401	203756
25°	201486	205150	198744
30°	190737	196168	187219
35°	170908	177670	167531
40°	145199	147004	141588
45°	122859	112295	118559
50°	103739	79208	102450
55°	91165	51128	90199
60°	80781	30428	81342
65°	74639	18339	74639
70°	64703	10510	63100
75°	51322	6428	48120
80°	38247	4809	36631
85°	34883	3144	31739



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.7	4.9
10°-20°	854.3	14.4
20°-30°	1284.9	21.6
30°-40°	1350.9	22.7
40°-50°	1009.2	17.0
50°-60°	628.3	10.6
60°-70°	357.3	6.0
70°-80°	147.2	2.5
80°-90°	30.4	0.5
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°	2427.9	40.8
0°-40°	3778.9	63.5
0°-60°	5416.4	91.0
0°-90°	5951.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5951.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2998	2998	2998	2998	2998	
5°	3054	3028	3007	2998	3007	292
15°	3075	3036	3024	3011	3032	864
25°	2799	2808	2850	2786	2761	1281
35°	2146	2201	2231	2167	2104	1332
45°	1332	1361	1217	1336	1285	1032
55°	802	785	450	772	793	721
65°	484	433	119	433	484	476
75°	204	161	26	157	191	221
85°	47	30	4	26	42	52
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°	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4
2.5°	3028.0	3023.9	3028.0	3019.6	3015.4	3015.4	3019.6	3011.1	3006.9	3011.1	3006.9
5°	3053.5	3045.0	3049.2	3045.0	3036.5	3036.5	3040.8	3028.0	3028.0	3032.2	3028.0
7.5°	3070.5	3070.5	3070.5	3062.0	3057.8	3053.5	3062.0	3049.2	3045.0	3045.0	3040.8
10°	3083.1	3079.0	3083.1	3074.8	3066.2	3062.0	3070.5	3062.0	3053.5	3062.0	3049.2
12.5°	3079.0	3079.0	3079.0	3074.8	3066.2	3062.0	3070.5	3057.8	3053.5	3057.8	3049.2
15°	3074.8	3062.0	3066.2	3062.0	3049.2	3049.2	3053.5	3040.8	3032.2	3045.0	3036.5
17.5°	3036.5	3028.0	3032.2	3023.9	3015.4	3011.1	3015.4	3011.1	3002.6	3011.1	3002.6
20°	2972.9	2972.9	2977.1	2968.6	2960.2	2956.0	2964.5	2956.0	2947.5	2960.2	2960.2
22.5°	2896.6	2896.6	2896.6	2892.4	2888.1	2888.1	2888.1	2883.9	2879.6	2888.1	2892.4
25°	2799.0	2794.8	2799.0	2803.2	2799.0	2794.8	2799.0	2799.0	2790.5	2807.5	2807.5
27.5°	2676.0	2676.0	2684.5	2680.2	2680.2	2676.0	2684.5	2684.5	2680.2	2693.0	2705.8
30°	2531.9	2523.4	2531.9	2531.9	2536.1	2536.1	2540.4	2540.4	2540.4	2553.1	2561.5
32.5°	2345.2	2349.5	2362.2	2358.0	2353.8	2366.5	2366.5	2375.0	2379.1	2387.6	2391.9
35°	2145.9	2150.1	2150.1	2154.4	2162.9	2154.4	2175.6	2171.4	2175.6	2192.6	2201.1
37.5°	1933.9	1921.1	1942.4	1933.9	1938.1	1938.1	1946.6	1950.9	1963.6	1984.8	1984.8
40°	1704.9	1709.1	1717.6	1721.9	1726.1	1726.1	1726.1	1738.8	1743.0	1768.5	1764.2
42.5°	1505.5	1505.5	1514.0	1518.2	1518.2	1518.2	1518.2	1531.0	1539.5	1548.0	1556.4
45°	1331.6	1319.0	1327.4	1327.4	1335.9	1331.6	1340.1	1348.6	1352.9	1365.6	1361.4
47.5°	1166.2	1162.0	1166.2	1170.5	1166.2	1170.5	1174.8	1179.0	1183.2	1183.2	1183.2
50°	1022.1	1022.1	1026.4	1030.5	1030.5	1030.5	1030.5	1034.8	1034.8	1043.2	1034.8
52.5°	903.4	907.6	907.6	903.4	907.6	907.6	911.8	911.8	907.6	907.6	894.9
55°	801.5	797.2	801.5	797.2	801.5	801.5	797.2	797.2	793.0	788.9	784.6
57.5°	704.0	704.0	704.0	704.0	699.8	704.0	699.8	695.5	695.5	687.0	674.4
60°	619.1	619.1	619.1	619.1	619.1	615.0	619.1	615.0	606.5	598.0	581.0
62.5°	547.1	542.9	547.1	542.9	542.9	538.6	538.6	534.4	525.9	517.4	500.4
65°	483.5	487.8	483.5	483.5	479.2	475.0	475.0	470.8	458.0	449.5	432.6
67.5°	415.6	411.4	411.4	411.4	407.1	407.1	407.1	398.6	390.1	377.5	360.5
70°	339.2	339.2	339.2	335.0	335.0	330.8	330.8	326.5	318.1	309.6	288.4
72.5°	267.1	267.1	267.1	258.8	263.0	258.8	258.8	250.2	246.0	233.2	220.5
75°	203.6	203.6	199.4	199.4	195.1	190.9	190.9	186.6	182.4	173.9	161.1
77.5°	148.4	148.4	148.4	144.2	140.0	135.8	135.8	131.5	127.2	123.0	114.5
80°	101.8	101.8	101.8	101.8	97.5	93.2	93.2	89.0	89.0	84.9	76.4
82.5°	67.9	67.9	67.9	67.9	63.6	63.6	63.6	59.4	55.1	55.1	46.6
85°	46.6	46.6	42.4	42.4	42.4	42.4	38.1	38.1	33.9	29.6	29.6
87.5°	25.5	25.5	25.5	25.5	21.2	21.2	21.2	21.2	17.0	17.0	12.8
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°	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4
2.5°	3019.6	3019.6	3015.4	3002.6	3006.9	3002.6	3006.9	3002.6	2989.9	3002.6	2989.9
5°	3036.5	3040.8	3032.2	3015.4	3019.6	3015.4	3015.4	3011.1	2998.4	3006.9	2998.4
7.5°	3053.5	3049.2	3045.0	3028.0	3032.2	3028.0	3028.0	3019.6	3006.9	3015.4	3002.6
10°	3062.0	3062.0	3053.5	3036.5	3036.5	3032.2	3036.5	3032.2	3015.4	3028.0	3019.6
12.5°	3062.0	3057.8	3057.8	3036.5	3040.8	3036.5	3040.8	3032.2	3019.6	3028.0	3023.9
15°	3049.2	3049.2	3045.0	3023.9	3028.0	3028.0	3032.2	3023.9	3011.1	3023.9	3015.4
17.5°	3023.9	3023.9	3019.6	3002.6	3011.1	3011.1	3015.4	3006.9	2994.1	3002.6	3002.6
20°	2972.9	2977.1	2977.1	2964.5	2972.9	2972.9	2977.1	2972.9	2968.6	2972.9	2964.5
22.5°	2913.5	2922.0	2922.0	2909.2	2917.8	2917.8	2930.5	2926.2	2917.8	2922.0	2917.8
25°	2824.5	2833.0	2841.5	2833.0	2841.5	2841.5	2854.1	2849.9	2841.5	2849.9	2837.2
27.5°	2722.8	2727.0	2735.4	2727.0	2739.6	2735.4	2748.1	2743.9	2731.1	2743.9	2739.6
30°	2578.5	2595.5	2608.2	2595.5	2608.2	2608.2	2616.6	2612.5	2608.2	2604.0	2604.0
32.5°	2417.4	2434.4	2434.4	2430.1	2438.5	2438.5	2442.8	2434.4	2430.1	2434.4	2438.5
35°	2218.0	2226.5	2235.0	2230.8	2235.0	2239.2	2235.0	2239.2	2226.5	2230.8	2230.8
37.5°	2001.8	2010.2	2010.2	1997.5	2006.0	2006.0	1997.5	1997.5	1989.0	1997.5	1980.5
40°	1772.8	1764.2	1768.5	1760.0	1751.5	1751.5	1747.2	1730.4	1721.9	1726.1	1730.4
42.5°	1548.0	1548.0	1535.2	1514.0	1492.9	1492.9	1480.1	1471.6	1454.6	1463.1	1458.9
45°	1357.1	1335.9	1319.0	1285.0	1272.2	1263.8	1242.6	1221.4	1212.9	1217.1	1212.9
47.5°	1174.8	1157.8	1115.4	1068.8	1056.0	1043.2	1017.9	992.4	983.9	975.4	975.4
50°	1022.1	992.4	945.8	894.9	873.6	852.4	818.5	793.0	776.1	780.4	780.4
52.5°	882.1	848.2	793.0	729.5	704.0	678.5	648.9	619.1	606.5	602.2	602.2
55°	759.1	721.0	665.9	593.8	572.5	542.9	504.6	470.8	453.8	449.5	458.0
57.5°	648.9	615.0	551.4	479.2	453.8	424.1	385.9	356.2	335.0	330.8	335.0
60°	559.8	513.1	458.0	390.1	356.2	330.8	288.4	263.0	241.8	233.2	237.5
62.5°	470.8	428.4	373.2	305.4	279.9	254.5	216.2	186.6	169.6	165.4	169.6
65°	402.9	360.5	309.6	250.2	224.8	199.4	165.4	135.8	123.0	118.8	123.0
67.5°	335.0	296.9	254.5	199.4	178.1	156.9	123.0	101.8	84.9	80.6	84.9
70°	271.4	237.5	195.1	156.9	135.8	118.8	93.2	72.1	59.4	55.1	59.4
72.5°	203.6	178.1	148.4	114.5	101.8	89.0	67.9	50.9	42.4	38.1	42.4
75°	148.4	127.2	106.0	80.6	72.1	63.6	46.6	33.9	29.6	25.5	29.6
77.5°	101.8	89.0	72.1	55.1	46.6	42.4	29.6	25.5	21.2	17.0	17.0
80°	67.9	59.4	46.6	38.1	33.9	29.6	21.2	17.0	12.8	12.8	12.8
82.5°	42.4	33.9	29.6	21.2	17.0	17.0	12.8	8.5	8.5	8.5	8.5
85°	25.5	21.2	17.0	12.8	8.5	8.5	4.2	4.2	4.2	4.2	4.2
87.5°	12.8	8.5	8.5	4.2	4.2	4.2	4.2	4.2	0.0	0.0	4.2
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°	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4
2.5°	2998.4	2989.9	2989.9	2994.1	2998.4	3002.6	2994.1	2989.9	2989.9	3002.6	2994.1
5°	2998.4	2994.1	2994.1	2994.1	3002.6	3006.9	2998.4	2994.1	2998.4	3011.1	3006.9
7.5°	3011.1	3002.6	3006.9	3006.9	3011.1	3019.6	3011.1	3006.9	3011.1	3023.9	3015.4
10°	3019.6	3011.1	3015.4	3011.1	3023.9	3028.0	3019.6	3015.4	3019.6	3036.5	3032.2
12.5°	3023.9	3019.6	3019.6	3015.4	3028.0	3032.2	3023.9	3019.6	3023.9	3036.5	3032.2
15°	3015.4	3011.1	3011.1	3011.1	3019.6	3028.0	3015.4	3011.1	3011.1	3023.9	3019.6
17.5°	2998.4	2989.9	2989.9	2989.9	2994.1	2998.4	2985.6	2981.4	2977.1	2989.9	2985.6
20°	2968.6	2960.2	2951.8	2951.8	2956.0	2956.0	2947.5	2934.8	2934.8	2939.0	2930.5
22.5°	2913.5	2909.2	2900.9	2896.6	2905.1	2900.9	2883.9	2871.1	2866.9	2871.1	2862.6
25°	2837.2	2828.8	2824.5	2820.2	2824.5	2820.2	2803.2	2786.4	2786.4	2786.4	2773.6
27.5°	2731.1	2722.8	2718.5	2718.5	2722.8	2714.2	2697.2	2680.2	2671.8	2671.8	2659.1
30°	2595.5	2595.5	2591.2	2587.0	2582.8	2582.8	2557.2	2540.4	2531.9	2536.1	2527.6
32.5°	2430.1	2425.9	2421.6	2408.9	2413.1	2408.9	2387.6	2375.0	2362.2	2353.8	2349.5
35°	2218.0	2218.0	2213.8	2213.8	2213.8	2209.5	2188.4	2175.6	2167.1	2162.9	2150.1
37.5°	1984.8	1980.5	1976.2	1976.2	1976.2	1976.2	1963.6	1950.9	1950.9	1946.6	1938.1
40°	1721.9	1726.1	1730.4	1726.1	1738.8	1751.5	1734.5	1726.1	1721.9	1734.5	1717.6
42.5°	1467.4	1463.1	1484.4	1488.6	1488.6	1509.8	1514.0	1518.2	1514.0	1522.5	1522.5
45°	1221.4	1217.1	1238.4	1246.9	1268.0	1293.5	1306.2	1327.4	1335.9	1344.4	1335.9
47.5°	988.1	1005.1	1022.1	1043.2	1060.2	1102.6	1128.1	1149.2	1157.8	1170.5	1170.5
50°	793.0	810.0	839.8	856.6	877.9	928.8	971.1	1000.9	1017.9	1030.5	1026.4
52.5°	610.8	640.4	678.5	695.5	725.2	784.6	831.2	865.1	886.4	899.1	903.4
55°	470.8	496.2	534.4	559.8	589.5	653.1	712.5	750.6	771.9	788.9	797.2
57.5°	347.8	377.5	419.9	441.0	475.0	547.1	598.0	644.6	670.1	691.2	695.5
60°	254.5	284.1	322.4	347.8	381.6	453.8	513.1	555.6	585.2	602.2	610.8
62.5°	182.4	212.0	250.2	275.6	305.4	369.0	428.4	470.8	500.4	521.6	534.4
65°	131.5	161.1	199.4	220.5	246.0	305.4	360.5	402.9	432.6	458.0	466.5
67.5°	97.5	118.8	152.6	173.9	199.4	246.0	292.6	330.8	360.5	381.6	390.1
70°	72.1	89.0	118.8	131.5	148.4	190.9	229.0	263.0	288.4	305.4	313.9
72.5°	50.9	63.6	84.9	97.5	110.2	144.2	173.9	199.4	216.2	233.2	241.8
75°	33.9	42.4	59.4	67.9	76.4	101.8	123.0	144.2	156.9	169.6	173.9
77.5°	21.2	29.6	42.4	46.6	55.1	67.9	84.9	97.5	106.0	114.5	123.0
80°	12.8	17.0	25.5	29.6	33.9	46.6	55.1	63.6	72.1	80.6	84.9
82.5°	8.5	12.8	17.0	17.0	21.2	25.5	33.9	42.4	46.6	50.9	55.1
85°	4.2	4.2	8.5	8.5	12.8	12.8	17.0	21.2	25.5	29.6	33.9
87.5°	4.2	4.2	4.2	4.2	8.5	8.5	12.8	12.8	12.8	17.0	17.0
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: P252733

CATALOG NUMBER: LE_6B60D010R EC6B60709030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4	2998.4
2.5°	2985.6	2998.4	2985.6	2994.1	2989.9	2989.9	2985.6	2989.9
5°	2998.4	3015.4	2998.4	3011.1	3002.6	3002.6	3002.6	3006.9
7.5°	3011.1	3028.0	3015.4	3028.0	3023.9	3019.6	3019.6	3028.0
10°	3023.9	3036.5	3028.0	3040.8	3036.5	3032.2	3032.2	3040.8
12.5°	3023.9	3040.8	3032.2	3045.0	3040.8	3036.5	3036.5	3040.8
15°	3011.1	3032.2	3019.6	3032.2	3028.0	3023.9	3023.9	3032.2
17.5°	2972.9	2989.9	2981.4	2989.9	2989.9	2985.6	2989.9	2994.1
20°	2922.0	2934.8	2926.2	2934.8	2934.8	2926.2	2930.5	2934.8
22.5°	2849.9	2862.6	2854.1	2862.6	2858.4	2854.1	2854.1	2849.9
25°	2760.9	2777.9	2765.1	2773.6	2765.1	2756.6	2756.6	2760.9
27.5°	2650.6	2663.4	2646.4	2654.9	2646.4	2637.9	2637.9	2633.6
30°	2506.4	2510.6	2497.9	2506.4	2497.9	2493.8	2485.2	2485.2
32.5°	2332.5	2336.8	2324.0	2324.0	2315.6	2315.6	2298.6	2311.4
35°	2129.0	2133.2	2129.0	2124.8	2112.0	2107.8	2103.5	2103.5
37.5°	1916.9	1916.9	1904.2	1900.0	1891.5	1883.0	1887.2	1874.5
40°	1700.6	1696.4	1683.6	1687.9	1683.6	1671.0	1666.8	1662.5
42.5°	1497.1	1497.1	1484.4	1488.6	1480.1	1475.9	1463.1	1467.4
45°	1319.0	1319.0	1306.2	1306.2	1302.0	1289.2	1293.5	1285.0
47.5°	1157.8	1157.8	1153.5	1153.5	1140.9	1136.6	1136.6	1136.6
50°	1017.9	1017.9	1017.9	1017.9	1013.6	1009.4	1005.1	1009.4
52.5°	899.1	907.6	903.4	903.4	899.1	894.9	890.6	890.6
55°	793.0	797.2	797.2	801.5	797.2	793.0	797.2	793.0
57.5°	699.8	708.2	708.2	708.2	708.2	708.2	704.0	699.8
60°	619.1	623.4	623.4	627.6	627.6	627.6	623.4	623.4
62.5°	538.6	547.1	551.4	551.4	555.6	551.4	551.4	551.4
65°	475.0	483.5	487.8	483.5	487.8	487.8	483.5	483.5
67.5°	398.6	407.1	407.1	407.1	407.1	411.4	407.1	407.1
70°	322.4	330.8	326.5	330.8	330.8	330.8	330.8	330.8
72.5°	246.0	250.2	254.5	254.5	258.8	254.5	254.5	254.5
75°	178.1	186.6	186.6	186.6	186.6	190.9	190.9	190.9
77.5°	127.2	131.5	131.5	135.8	135.8	135.8	135.8	140.0
80°	89.0	89.0	93.2	93.2	97.5	97.5	97.5	97.5
82.5°	59.4	63.6	63.6	63.6	63.6	63.6	63.6	63.6
85°	33.9	38.1	38.1	38.1	38.1	42.4	42.4	42.4
87.5°	21.2	21.2	21.2	21.2	21.2	21.2	17.0	17.0
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)