

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: P252628

Luminaire Tested: **LE_6B60D010R EC6B60709027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252628
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B60D010R EC6B60709027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6112.5 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

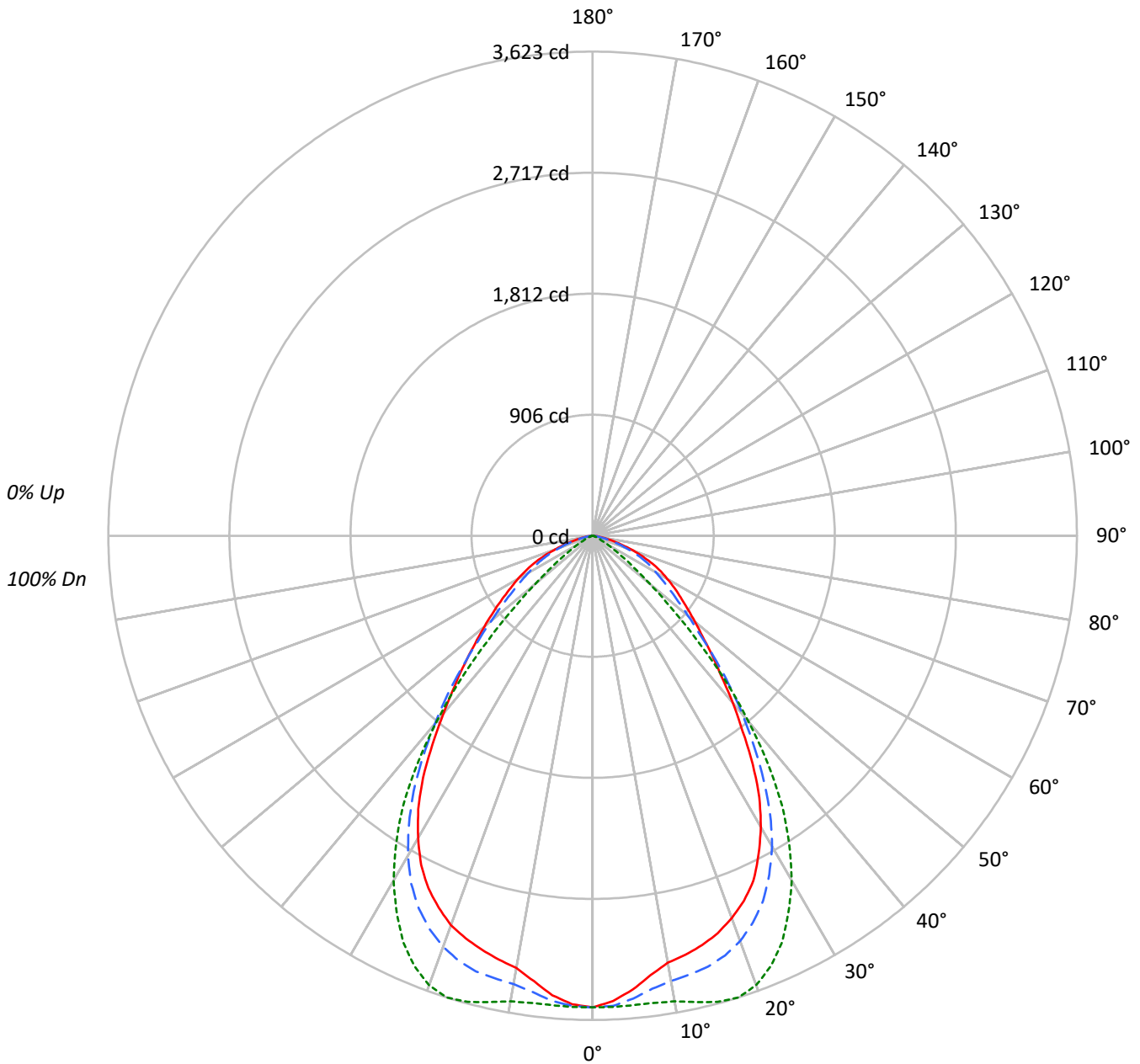
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	230234	230234	230234
5°	223373	230852	226038
10°	214872	234329	217569
15°	214108	243867	216594
20°	211303	248412	215267
25°	204999	241409	209397
30°	189629	224358	196703
35°	166369	197239	176109
40°	138641	154618	147669
45°	116696	102007	124594
50°	101040	55904	107241
55°	91427	29698	93736
60°	84108	15449	84108
65°	76198	8182	74315
70°	61460	4673	56825
75°	42146	3075	39071
80°	27577	1540	24496
85°	18340	3069	15270



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.1	5.4
10°-20°	951.6	15.6
20°-30°	1405.9	23.0
30°-40°	1420.1	23.2
40°-50°	978.8	16.0
50°-60°	562.2	9.2
60°-70°	327.2	5.4
70°-80°	119.4	2.0
80°-90°	18.2	0.3
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°	2686.6	44.0
0°-40°	4106.7	67.2
0°-60°	5647.7	92.4
0°-90°	6112.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6112.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3529	3529	3529	3529	3529	
5°	3411	3476	3525	3492	3452	320
15°	3170	3337	3611	3374	3207	893
25°	2848	3015	3354	3076	2909	1297
35°	2089	2232	2476	2334	2211	1297
45°	1265	1281	1106	1363	1350	984
55°	804	706	261	734	824	724
65°	494	416	53	412	481	483
75°	167	135	12	130	155	188
85°	24	12	4	16	20	31
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°	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0
2.5°	3484.1	3488.2	3492.4	3488.2	3492.4	3508.6	3496.4	3504.6	3504.6	3508.6	3520.9
5°	3410.8	3410.8	3418.9	3414.9	3427.0	3443.4	3431.1	3443.4	3447.5	3455.6	3476.0
7.5°	3316.9	3316.9	3321.0	3321.0	3337.2	3353.6	3345.5	3361.8	3378.1	3394.4	3418.9
10°	3243.5	3251.6	3251.6	3255.8	3272.0	3292.4	3288.4	3308.8	3325.0	3349.5	3382.1
12.5°	3210.9	3214.9	3214.9	3223.1	3239.4	3259.8	3255.8	3276.1	3300.6	3329.1	3361.8
15°	3170.0	3178.1	3174.1	3182.2	3198.6	3219.0	3214.9	3235.2	3263.9	3292.4	3337.2
17.5°	3117.0	3121.1	3125.1	3125.1	3141.5	3157.8	3157.8	3178.1	3210.9	3243.5	3292.4
20°	3043.5	3051.8	3051.8	3055.8	3068.0	3092.5	3088.4	3108.9	3141.5	3174.1	3227.1
22.5°	2957.9	2962.0	2962.0	2966.0	2986.4	2998.6	3002.8	3019.1	3047.6	3084.4	3133.2
25°	2847.8	2851.8	2847.8	2860.0	2868.1	2892.6	2884.5	2904.9	2937.5	2966.0	3015.0
27.5°	2688.6	2696.8	2696.8	2700.9	2721.2	2741.6	2741.6	2762.0	2790.6	2811.0	2860.0
30°	2517.2	2529.5	2517.2	2537.6	2545.8	2562.1	2574.4	2586.6	2611.1	2639.6	2684.5
32.5°	2321.4	2317.4	2321.4	2329.6	2354.0	2366.2	2374.5	2386.8	2411.1	2435.6	2472.4
35°	2088.9	2097.0	2101.1	2117.4	2117.4	2137.9	2141.9	2150.1	2186.8	2203.1	2231.6
37.5°	1844.1	1852.2	1856.4	1864.5	1880.8	1889.0	1901.2	1913.5	1937.9	1966.5	1982.8
40°	1627.9	1627.9	1631.9	1640.1	1652.4	1656.4	1668.6	1685.0	1701.2	1725.8	1742.1
42.5°	1423.9	1428.0	1423.9	1432.0	1444.2	1460.6	1456.5	1476.9	1481.0	1497.2	1509.5
45°	1264.8	1264.8	1256.6	1264.8	1264.8	1281.1	1277.0	1285.1	1281.1	1289.2	1281.1
47.5°	1113.8	1117.9	1113.8	1117.9	1117.9	1117.9	1122.0	1113.8	1117.9	1105.6	1081.1
50°	995.5	999.5	991.4	995.5	991.4	987.4	991.4	979.1	975.1	958.8	934.2
52.5°	893.5	889.4	885.4	885.4	885.4	881.2	877.1	864.9	852.6	836.4	807.8
55°	803.8	799.6	795.6	795.6	787.4	783.4	783.4	771.1	758.9	738.5	705.8
57.5°	722.1	718.0	714.0	714.0	709.9	701.8	701.8	689.5	673.1	648.8	620.1
60°	644.6	644.6	644.6	640.5	640.5	632.4	632.4	620.1	603.9	579.4	546.8
62.5°	575.2	571.1	571.1	571.1	571.1	567.1	563.0	554.9	538.5	514.0	485.5
65°	493.6	493.6	493.6	493.6	489.6	489.6	489.6	477.4	469.1	444.8	416.1
67.5°	403.9	403.9	403.9	403.9	399.9	403.9	403.9	395.8	387.6	363.1	338.6
70°	322.2	318.2	314.1	318.2	314.1	314.1	318.2	310.1	306.0	285.6	261.1
72.5°	236.6	240.8	236.6	236.6	236.6	232.5	236.6	232.5	224.4	208.1	191.8
75°	167.2	171.4	171.4	167.2	167.2	167.2	163.2	163.2	155.0	142.8	134.6
77.5°	114.2	114.2	114.2	114.2	110.1	110.1	110.1	106.1	102.0	93.9	85.6
80°	73.4	73.4	73.4	73.4	69.4	69.4	69.4	65.2	65.2	57.1	49.0
82.5°	44.9	44.9	44.9	44.9	44.9	44.9	40.8	40.8	36.8	32.6	28.5
85°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	20.4	20.4	16.4	12.2
87.5°	8.1	8.1	12.2	12.2	12.2	12.2	12.2	12.2	8.1	8.1	8.1
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°	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0
2.5°	3512.8	3516.8	3516.8	3516.8	3529.0	3533.1	3520.9	3508.6	3533.1	3529.0	3537.2
5°	3471.9	3484.1	3492.4	3496.4	3508.6	3516.8	3504.6	3500.5	3520.9	3525.0	3529.0
7.5°	3423.0	3443.4	3463.8	3471.9	3488.2	3496.4	3492.4	3492.4	3516.8	3525.0	3525.0
10°	3390.4	3418.9	3443.4	3463.8	3484.1	3496.4	3496.4	3500.5	3529.0	3537.2	3545.4
12.5°	3382.1	3418.9	3451.5	3480.1	3496.4	3516.8	3520.9	3533.1	3561.8	3573.9	3573.9
15°	3361.8	3410.8	3451.5	3488.2	3512.8	3537.2	3545.4	3569.9	3602.5	3610.6	3618.8
17.5°	3325.0	3374.0	3423.0	3467.9	3500.5	3520.9	3545.4	3569.9	3610.6	3622.9	3627.0
20°	3259.8	3316.9	3365.9	3410.8	3443.4	3471.9	3496.4	3525.0	3561.8	3578.0	3582.1
22.5°	3161.9	3219.0	3268.0	3316.9	3349.5	3374.0	3398.5	3431.1	3467.9	3484.1	3484.1
25°	3043.5	3096.6	3149.6	3186.4	3219.0	3247.5	3259.8	3296.5	3333.2	3353.6	3353.6
27.5°	2892.6	2941.5	2990.5	3031.2	3051.8	3076.2	3096.6	3129.2	3157.8	3174.1	3190.4
30°	2700.9	2749.8	2794.6	2835.5	2860.0	2884.5	2904.9	2929.4	2957.9	2978.2	2982.4
32.5°	2492.8	2533.6	2578.5	2619.2	2643.8	2651.9	2672.2	2696.8	2721.2	2737.6	2741.6
35°	2264.2	2292.9	2321.4	2358.1	2382.6	2382.6	2403.0	2419.4	2439.8	2476.5	2468.2
37.5°	1995.0	2035.9	2056.2	2068.5	2084.8	2101.1	2105.2	2125.6	2150.1	2158.2	2170.5
40°	1742.1	1754.4	1766.6	1766.6	1782.9	1782.9	1782.9	1787.0	1811.5	1815.5	1831.9
42.5°	1489.1	1489.1	1476.9	1464.6	1468.8	1464.6	1444.2	1444.2	1456.5	1472.9	1472.9
45°	1252.5	1224.0	1187.2	1158.6	1138.2	1130.1	1105.6	1105.6	1101.5	1105.6	1122.0
47.5°	1052.6	1003.6	942.5	885.4	864.9	848.6	811.9	795.6	787.4	791.5	799.6
50°	885.4	832.2	762.9	693.6	656.9	636.5	591.6	563.0	558.9	550.8	567.1
52.5°	762.9	697.6	624.2	542.6	505.9	473.2	424.2	399.9	383.5	383.5	387.6
55°	656.9	587.5	505.9	424.2	387.6	363.1	314.1	281.5	265.2	261.1	273.4
57.5°	567.1	501.9	420.2	338.6	301.9	273.4	224.4	195.9	183.6	175.4	179.5
60°	497.8	432.5	350.9	273.4	240.8	208.1	167.2	134.6	118.4	118.4	122.4
62.5°	432.5	371.2	297.9	224.4	195.9	167.2	122.4	93.9	81.6	77.5	81.6
65°	367.1	310.1	248.9	187.6	159.1	134.6	97.9	73.4	57.1	53.0	57.1
67.5°	297.9	253.0	199.9	151.0	126.5	106.1	73.4	53.0	40.8	36.8	40.8
70°	232.5	191.8	151.0	110.1	93.9	77.5	53.0	40.8	28.5	24.5	28.5
72.5°	167.2	138.8	106.1	77.5	65.2	53.0	36.8	28.5	20.4	16.4	20.4
75°	114.2	93.9	69.4	49.0	40.8	36.8	24.5	16.4	12.2	12.2	12.2
77.5°	73.4	57.1	44.9	32.6	24.5	20.4	12.2	8.1	8.1	8.1	8.1
80°	40.8	32.6	24.5	16.4	12.2	12.2	8.1	8.1	4.1	4.1	4.1
82.5°	24.5	16.4	12.2	8.1	8.1	4.1	4.1	4.1	4.1	4.1	4.1
85°	12.2	8.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
87.5°	4.1	4.1	4.1	4.1	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0
2.5°	3520.9	3525.0	3512.8	3529.0	3516.8	3533.1	3533.1	3516.8	3520.9	3512.8	3529.0
5°	3512.8	3512.8	3504.6	3516.8	3500.5	3516.8	3512.8	3484.1	3492.4	3476.0	3492.4
7.5°	3512.8	3504.6	3492.4	3504.6	3484.1	3496.4	3480.1	3451.5	3443.4	3423.0	3423.0
10°	3525.0	3512.8	3496.4	3500.5	3480.1	3484.1	3459.8	3418.9	3406.6	3382.1	3374.0
12.5°	3553.5	3541.2	3516.8	3525.0	3496.4	3496.4	3463.8	3414.9	3390.4	3357.8	3349.5
15°	3594.4	3573.9	3545.4	3549.5	3520.9	3504.6	3463.8	3406.6	3374.0	3329.1	3316.9
17.5°	3602.5	3582.1	3545.4	3545.4	3508.6	3488.2	3439.2	3374.0	3333.2	3288.4	3263.9
20°	3557.6	3537.2	3496.4	3492.4	3459.8	3431.1	3378.1	3312.9	3272.0	3223.1	3202.6
22.5°	3463.8	3439.2	3402.6	3398.5	3365.9	3349.5	3292.4	3227.1	3186.4	3137.4	3121.1
25°	3325.0	3312.9	3276.1	3272.0	3243.5	3223.1	3174.1	3112.9	3076.2	3027.2	3010.9
27.5°	3161.9	3149.6	3112.9	3112.9	3080.2	3068.0	3023.1	2966.0	2937.5	2892.6	2872.2
30°	2966.0	2949.8	2929.4	2925.2	2896.6	2884.5	2843.6	2790.6	2762.0	2725.4	2717.1
32.5°	2733.5	2721.2	2709.0	2704.9	2676.4	2664.1	2635.6	2582.5	2558.0	2525.4	2513.1
35°	2464.2	2456.0	2443.9	2439.8	2427.5	2415.2	2386.8	2345.9	2333.6	2309.1	2297.0
37.5°	2154.1	2162.2	2154.1	2154.1	2141.9	2146.0	2121.5	2097.0	2084.8	2068.5	2060.4
40°	1819.6	1835.9	1848.1	1848.1	1844.1	1860.4	1856.4	1835.9	1831.9	1823.6	1819.6
42.5°	1481.0	1489.1	1513.6	1529.9	1525.9	1566.6	1570.8	1587.0	1599.2	1591.1	1595.2
45°	1126.0	1150.5	1183.1	1199.5	1219.9	1272.9	1301.5	1334.1	1362.6	1379.0	1374.9
47.5°	811.9	840.5	877.1	901.6	938.4	1003.6	1077.1	1117.9	1158.6	1179.1	1199.5
50°	587.5	616.0	660.9	697.6	722.1	811.9	889.4	942.5	987.4	1015.9	1036.2
52.5°	412.1	444.8	493.6	526.2	563.0	648.8	738.5	799.6	848.6	885.4	905.8
55°	285.6	322.2	367.1	399.9	440.6	530.4	616.0	681.4	734.4	767.0	791.5
57.5°	199.9	232.5	277.4	306.0	346.8	432.5	518.1	583.4	636.5	669.1	697.6
60°	134.6	167.2	212.1	240.8	273.4	359.0	436.5	505.9	554.9	587.5	616.0
62.5°	93.9	122.4	167.2	195.9	224.4	297.9	371.2	432.5	481.4	518.1	542.6
65°	73.4	97.9	134.6	159.1	187.6	248.9	310.1	363.1	412.1	448.8	465.1
67.5°	53.0	77.5	106.1	126.5	146.9	199.9	253.0	293.8	338.6	367.1	387.6
70°	36.8	53.0	77.5	93.9	110.1	151.0	191.8	228.5	261.1	281.5	297.9
72.5°	28.5	36.8	53.0	65.2	77.5	106.1	138.8	167.2	191.8	208.1	224.4
75°	16.4	24.5	36.8	44.9	53.0	73.4	93.9	114.2	130.5	142.8	151.0
77.5°	8.1	12.2	20.4	24.5	32.6	44.9	61.2	73.4	85.6	93.9	102.0
80°	8.1	8.1	12.2	12.2	16.4	24.5	32.6	40.8	49.0	57.1	61.2
82.5°	4.1	4.1	8.1	8.1	8.1	12.2	16.4	24.5	28.5	32.6	36.8
85°	4.1	4.1	4.1	4.1	4.1	8.1	8.1	12.2	16.4	20.4	20.4
87.5°	0.0	0.0	4.1	4.1	4.1	4.1	4.1	8.1	8.1	8.1	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



TEST NUMBER: P252628

CATALOG NUMBER: LE_6B60D010R EC6B60709027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0	3529.0
2.5°	3516.8	3525.0	3520.9	3529.0	3516.8	3512.8	3520.9	3508.6
5°	3471.9	3476.0	3471.9	3471.9	3463.8	3455.6	3463.8	3451.5
7.5°	3402.6	3402.6	3390.4	3390.4	3374.0	3365.9	3365.9	3361.8
10°	3345.5	3333.2	3321.0	3325.0	3300.6	3292.4	3288.4	3284.2
12.5°	3316.9	3308.8	3288.4	3288.4	3263.9	3255.8	3251.6	3247.5
15°	3284.2	3268.0	3251.6	3247.5	3227.1	3219.0	3214.9	3206.8
17.5°	3227.1	3214.9	3194.5	3194.5	3174.1	3170.0	3161.9	3157.8
20°	3166.0	3149.6	3133.2	3133.2	3108.9	3108.9	3096.6	3100.6
22.5°	3080.2	3068.0	3051.8	3051.8	3031.2	3027.2	3015.0	3010.9
25°	2978.2	2962.0	2949.8	2945.6	2929.4	2921.1	2917.1	2908.9
27.5°	2843.6	2831.4	2819.1	2811.0	2790.6	2786.5	2774.2	2778.4
30°	2676.4	2668.2	2664.1	2656.0	2631.5	2623.4	2623.4	2611.1
32.5°	2492.8	2480.5	2472.4	2460.1	2439.8	2435.6	2423.4	2427.5
35°	2268.4	2252.1	2239.9	2243.9	2219.4	2215.4	2207.1	2211.2
37.5°	2035.9	2019.5	2003.2	1999.1	1978.8	1978.8	1966.5	1966.5
40°	1795.1	1778.8	1770.6	1770.6	1746.1	1750.2	1738.0	1733.9
42.5°	1578.9	1562.6	1558.5	1554.4	1542.1	1538.1	1525.9	1529.9
45°	1374.9	1370.9	1370.9	1362.6	1350.4	1346.4	1350.4	1350.4
47.5°	1195.4	1199.5	1195.4	1195.4	1187.2	1195.4	1187.2	1191.2
50°	1044.4	1052.6	1052.6	1052.6	1048.5	1052.6	1052.6	1056.6
52.5°	918.0	930.2	926.1	930.2	926.1	934.2	930.2	934.2
55°	807.8	816.0	820.0	824.1	824.1	824.1	824.1	824.1
57.5°	705.8	718.0	722.1	726.2	726.2	734.4	726.2	726.2
60°	624.2	636.5	640.5	644.6	644.6	648.8	640.5	644.6
62.5°	550.8	563.0	563.0	567.1	567.1	567.1	558.9	563.0
65°	477.4	481.4	485.5	485.5	481.4	481.4	477.4	481.4
67.5°	395.8	399.9	395.8	395.8	391.6	391.6	383.5	387.6
70°	306.0	306.0	310.1	306.0	301.9	306.0	301.9	297.9
72.5°	228.5	228.5	228.5	224.4	224.4	220.2	224.4	224.4
75°	155.0	155.0	159.1	159.1	159.1	159.1	155.0	155.0
77.5°	102.0	102.0	102.0	102.0	106.1	102.0	102.0	102.0
80°	65.2	65.2	69.4	69.4	65.2	65.2	65.2	65.2
82.5°	40.8	40.8	40.8	40.8	40.8	40.8	40.8	40.8
85°	24.5	24.5	24.5	24.5	20.4	20.4	20.4	20.4
87.5°	12.2	12.2	12.2	12.2	12.2	12.2	8.1	8.1
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)