

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: P252629

Luminaire Tested: **LE_6B60D010R EC6B60709030 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252629
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 EC6B60709030 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6355.0 lumens
Efficiency: N/A
Efficacy: 101.7 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

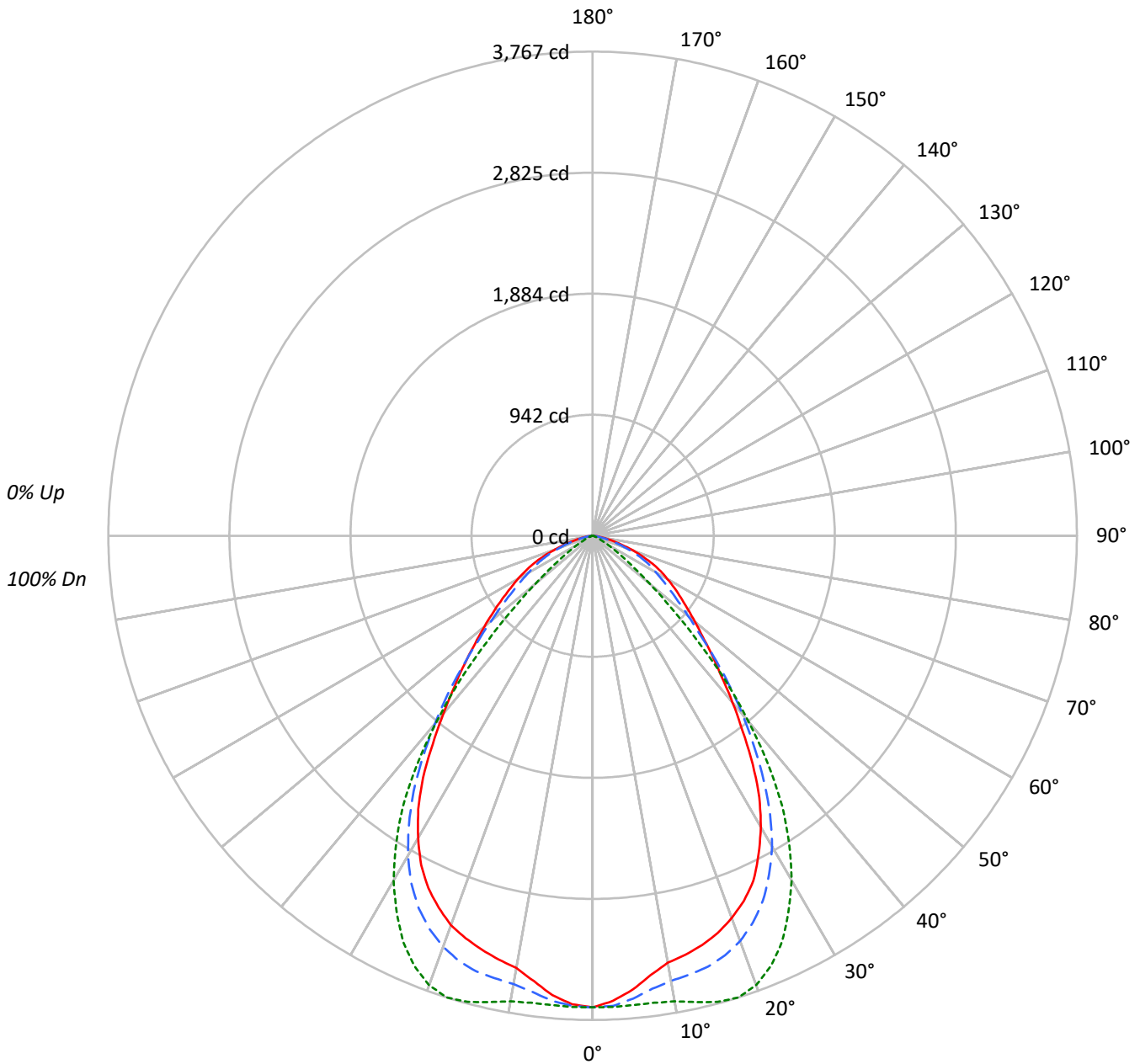
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	239368	239368	239368
5°	232227	240014	235010
10°	223392	243624	226201
15°	222605	253546	225185
20°	219683	258271	223807
25°	213133	250983	217712
30°	197155	233262	204500
35°	172971	205068	183102
40°	144134	160750	153537
45°	121318	106058	129539
50°	105049	58117	111504
55°	95044	30881	97467
60°	87435	16049	87435
65°	79224	8506	77263
70°	63921	4864	59056
75°	43835	3227	40609
80°	28704	1578	25510
85°	19088	3144	15869



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	342.1	5.4
10°-20°	989.3	15.6
20°-30°	1461.7	23.0
30°-40°	1476.4	23.2
40°-50°	1017.6	16.0
50°-60°	584.5	9.2
60°-70°	340.2	5.4
70°-80°	124.1	2.0
80°-90°	19.0	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°	2793.2	44.0
0°-40°	4269.6	67.2
0°-60°	5871.8	92.4
0°-90°	6355.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6355.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3669	3669	3669	3669	3669	
5°	3546	3614	3665	3631	3588	333
15°	3296	3470	3754	3508	3334	928
25°	2961	3135	3487	3198	3024	1349
35°	2172	2320	2575	2426	2299	1348
45°	1315	1332	1150	1417	1404	1023
55°	836	734	272	764	857	752
65°	513	433	55	428	500	503
75°	174	140	13	136	161	196
85°	26	13	4	17	21	32
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°	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0
2.5°	3622.4	3626.6	3630.9	3626.6	3630.9	3647.9	3635.1	3643.6	3643.6	3647.9	3660.6
5°	3546.0	3546.0	3554.5	3550.2	3563.0	3580.0	3567.2	3580.0	3584.2	3592.8	3613.9
7.5°	3448.5	3448.5	3452.8	3452.8	3469.8	3486.6	3478.1	3495.1	3512.1	3529.1	3554.5
10°	3372.1	3380.6	3380.6	3384.9	3401.9	3423.0	3418.8	3440.0	3457.0	3482.4	3516.4
12.5°	3338.2	3342.5	3342.5	3350.9	3367.9	3389.1	3384.9	3406.1	3431.5	3461.2	3495.1
15°	3295.8	3304.2	3300.0	3308.5	3325.5	3346.8	3342.5	3363.6	3393.4	3423.0	3469.8
17.5°	3240.6	3244.9	3249.1	3249.1	3266.1	3283.1	3283.1	3304.2	3338.2	3372.1	3423.0
20°	3164.2	3172.8	3172.8	3177.0	3189.8	3215.2	3211.0	3232.1	3266.1	3300.0	3355.1
22.5°	3075.2	3079.5	3079.5	3083.8	3104.9	3117.6	3121.9	3138.9	3168.5	3206.8	3257.6
25°	2960.8	2965.0	2960.8	2973.4	2981.9	3007.4	2998.9	3020.1	3054.0	3083.8	3134.6
27.5°	2795.2	2803.8	2803.8	2808.0	2829.2	2850.4	2850.4	2871.6	2901.4	2922.5	2973.4
30°	2617.1	2629.9	2617.1	2638.4	2646.8	2663.8	2676.5	2689.2	2714.6	2744.4	2791.0
32.5°	2413.5	2409.2	2413.5	2422.0	2447.5	2460.1	2468.6	2481.4	2506.9	2532.2	2570.5
35°	2171.8	2180.2	2184.5	2201.4	2201.4	2222.6	2226.9	2235.4	2273.5	2290.5	2320.2
37.5°	1917.2	1925.8	1930.0	1938.5	1955.4	1963.9	1976.6	1989.4	2014.8	2044.5	2061.5
40°	1692.4	1692.4	1696.6	1705.1	1717.9	1722.1	1734.9	1751.9	1768.8	1794.2	1811.2
42.5°	1480.4	1484.6	1480.4	1488.9	1501.5	1518.5	1514.2	1535.5	1539.8	1556.8	1569.4
45°	1314.9	1314.9	1306.5	1314.9	1314.9	1331.9	1327.6	1336.1	1331.9	1340.4	1331.9
47.5°	1158.0	1162.2	1158.0	1162.2	1162.2	1162.2	1166.5	1158.0	1162.2	1149.5	1124.0
50°	1035.0	1039.2	1030.8	1035.0	1030.8	1026.5	1030.8	1018.0	1013.8	996.8	971.4
52.5°	928.9	924.6	920.5	920.5	920.5	916.2	912.0	899.2	886.5	869.5	839.9
55°	835.6	831.4	827.1	827.1	818.6	814.4	814.4	801.6	789.0	767.8	733.8
57.5°	750.8	746.5	742.2	742.2	738.0	729.6	729.6	716.9	699.9	674.4	644.8
60°	670.1	670.1	670.1	666.0	666.0	657.5	657.5	644.8	627.8	602.4	568.4
62.5°	598.1	593.9	593.9	593.9	593.9	589.6	585.4	576.9	559.9	534.5	504.8
65°	513.2	513.2	513.2	513.2	509.0	509.0	509.0	496.2	487.8	462.4	432.6
67.5°	419.9	419.9	419.9	419.9	415.6	419.9	419.9	411.5	403.0	377.5	352.0
70°	335.1	330.9	326.6	330.9	326.6	326.6	330.9	322.4	318.1	296.9	271.5
72.5°	246.0	250.2	246.0	246.0	246.0	241.8	246.0	241.8	233.2	216.4	199.4
75°	173.9	178.1	178.1	173.9	173.9	173.9	169.6	169.6	161.1	148.5	140.0
77.5°	118.8	118.8	118.8	118.8	114.5	114.5	114.5	110.2	106.0	97.5	89.1
80°	76.4	76.4	76.4	76.4	72.1	72.1	72.1	67.9	67.9	59.4	50.9
82.5°	46.6	46.6	46.6	46.6	46.6	46.6	42.4	42.4	38.1	33.9	29.8
85°	25.5	25.5	25.5	25.5	25.5	25.5	25.5	21.2	21.2	17.0	12.8
87.5°	8.5	8.5	12.8	12.8	12.8	12.8	12.8	12.8	8.5	8.5	8.5
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°	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0
2.5°	3652.1	3656.4	3656.4	3656.4	3669.0	3673.2	3660.6	3647.9	3673.2	3669.0	3677.5
5°	3609.6	3622.4	3630.9	3635.1	3647.9	3656.4	3643.6	3639.4	3660.6	3664.9	3669.0
7.5°	3558.8	3580.0	3601.2	3609.6	3626.6	3635.1	3630.9	3630.9	3656.4	3664.9	3664.9
10°	3524.9	3554.5	3580.0	3601.2	3622.4	3635.1	3635.1	3639.4	3669.0	3677.5	3686.0
12.5°	3516.4	3554.5	3588.5	3618.1	3635.1	3656.4	3660.6	3673.2	3703.0	3715.8	3715.8
15°	3495.1	3546.0	3588.5	3626.6	3652.1	3677.5	3686.0	3711.5	3745.4	3753.9	3762.4
17.5°	3457.0	3507.9	3558.8	3605.4	3639.4	3660.6	3686.0	3711.5	3753.9	3766.6	3770.9
20°	3389.1	3448.5	3499.4	3546.0	3580.0	3609.6	3635.1	3664.9	3703.0	3720.0	3724.2
22.5°	3287.2	3346.8	3397.6	3448.5	3482.4	3507.9	3533.4	3567.2	3605.4	3622.4	3622.4
25°	3164.2	3219.5	3274.6	3312.8	3346.8	3376.4	3389.1	3427.2	3465.5	3486.6	3486.6
27.5°	3007.4	3058.2	3109.1	3151.6	3172.8	3198.2	3219.5	3253.4	3283.1	3300.0	3317.0
30°	2808.0	2858.9	2905.5	2948.0	2973.4	2998.9	3020.1	3045.5	3075.2	3096.4	3100.6
32.5°	2591.6	2634.1	2680.8	2723.1	2748.6	2757.1	2778.2	2803.8	2829.2	2846.1	2850.4
35°	2354.1	2383.9	2413.5	2451.8	2477.1	2477.1	2498.4	2515.4	2536.5	2574.8	2566.2
37.5°	2074.1	2116.6	2137.8	2150.5	2167.5	2184.5	2188.8	2209.9	2235.4	2243.9	2256.6
40°	1811.2	1823.9	1836.6	1836.6	1853.6	1853.6	1853.6	1857.9	1883.2	1887.5	1904.5
42.5°	1548.2	1548.2	1535.5	1522.8	1527.0	1522.8	1501.5	1501.5	1514.2	1531.2	1531.2
45°	1302.2	1272.5	1234.4	1204.6	1183.4	1175.0	1149.5	1149.5	1145.2	1149.5	1166.5
47.5°	1094.4	1043.5	979.9	920.5	899.2	882.2	844.1	827.1	818.6	822.9	831.4
50°	920.5	865.2	793.2	721.1	682.9	661.8	615.0	585.4	581.1	572.6	589.6
52.5°	793.2	725.4	649.0	564.1	526.0	492.0	441.1	415.6	398.8	398.8	403.0
55°	682.9	610.8	526.0	441.1	403.0	377.5	326.6	292.6	275.8	271.5	284.2
57.5°	589.6	521.8	436.9	352.0	313.9	284.2	233.2	203.6	190.9	182.4	186.6
60°	517.5	449.6	364.8	284.2	250.2	216.4	173.9	140.0	123.0	123.0	127.2
62.5°	449.6	386.0	309.6	233.2	203.6	173.9	127.2	97.5	84.9	80.6	84.9
65°	381.8	322.4	258.8	195.1	165.4	140.0	101.8	76.4	59.4	55.1	59.4
67.5°	309.6	263.0	207.9	157.0	131.5	110.2	76.4	55.1	42.4	38.1	42.4
70°	241.8	199.4	157.0	114.5	97.5	80.6	55.1	42.4	29.8	25.5	29.8
72.5°	173.9	144.2	110.2	80.6	67.9	55.1	38.1	29.8	21.2	17.0	21.2
75°	118.8	97.5	72.1	50.9	42.4	38.1	25.5	17.0	12.8	12.8	12.8
77.5°	76.4	59.4	46.6	33.9	25.5	21.2	12.8	8.5	8.5	8.5	8.5
80°	42.4	33.9	25.5	17.0	12.8	12.8	8.5	8.5	4.2	4.2	4.2
82.5°	25.5	17.0	12.8	8.5	8.5	4.2	4.2	4.2	4.2	4.2	4.2
85°	12.8	8.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
87.5°	4.2	4.2	4.2	4.2	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°	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0
2.5°	3660.6	3664.9	3652.1	3669.0	3656.4	3673.2	3673.2	3656.4	3660.6	3652.1	3669.0
5°	3652.1	3652.1	3643.6	3656.4	3639.4	3656.4	3652.1	3622.4	3630.9	3613.9	3630.9
7.5°	3652.1	3643.6	3630.9	3643.6	3622.4	3635.1	3618.1	3588.5	3580.0	3558.8	3558.8
10°	3664.9	3652.1	3635.1	3639.4	3618.1	3622.4	3597.0	3554.5	3541.8	3516.4	3507.9
12.5°	3694.5	3681.8	3656.4	3664.9	3635.1	3635.1	3601.2	3550.2	3524.9	3490.9	3482.4
15°	3736.9	3715.8	3686.0	3690.2	3660.6	3643.6	3601.2	3541.8	3507.9	3461.2	3448.5
17.5°	3745.4	3724.2	3686.0	3686.0	3647.9	3626.6	3575.8	3507.9	3465.5	3418.8	3393.4
20°	3698.8	3677.5	3635.1	3630.9	3597.0	3567.2	3512.1	3444.2	3401.9	3350.9	3329.8
22.5°	3601.2	3575.8	3537.6	3533.4	3499.4	3482.4	3423.0	3355.1	3312.8	3261.9	3244.9
25°	3457.0	3444.2	3406.1	3401.9	3372.1	3350.9	3300.0	3236.4	3198.2	3147.4	3130.4
27.5°	3287.2	3274.6	3236.4	3236.4	3202.5	3189.8	3143.1	3083.8	3054.0	3007.4	2986.1
30°	3083.8	3066.8	3045.5	3041.2	3011.6	2998.9	2956.5	2901.4	2871.6	2833.5	2825.0
32.5°	2841.9	2829.2	2816.5	2812.2	2782.5	2769.9	2740.1	2685.0	2659.5	2625.6	2612.9
35°	2562.0	2553.5	2540.8	2536.5	2523.8	2511.1	2481.4	2439.0	2426.2	2400.8	2388.1
37.5°	2239.6	2248.1	2239.6	2239.6	2226.9	2231.1	2205.6	2180.2	2167.5	2150.5	2142.0
40°	1891.8	1908.8	1921.5	1921.5	1917.2	1934.2	1930.0	1908.8	1904.5	1896.0	1891.8
42.5°	1539.8	1548.2	1573.6	1590.6	1586.4	1628.8	1633.0	1650.0	1662.8	1654.2	1658.5
45°	1170.8	1196.1	1230.1	1247.0	1268.2	1323.4	1353.1	1387.0	1416.8	1433.8	1429.5
47.5°	844.1	873.8	912.0	937.4	975.6	1043.5	1119.8	1162.2	1204.6	1225.9	1247.0
50°	610.8	640.5	687.1	725.4	750.8	844.1	924.6	979.9	1026.5	1056.1	1077.4
52.5°	428.4	462.4	513.2	547.1	585.4	674.4	767.8	831.4	882.2	920.5	941.6
55°	296.9	335.1	381.8	415.6	458.1	551.4	640.5	708.4	763.5	797.4	822.9
57.5°	207.9	241.8	288.4	318.1	360.5	449.6	538.8	606.5	661.8	695.6	725.4
60°	140.0	173.9	220.6	250.2	284.2	373.2	453.9	526.0	576.9	610.8	640.5
62.5°	97.5	127.2	173.9	203.6	233.2	309.6	386.0	449.6	500.5	538.8	564.1
65°	76.4	101.8	140.0	165.4	195.1	258.8	322.4	377.5	428.4	466.6	483.5
67.5°	55.1	80.6	110.2	131.5	152.8	207.9	263.0	305.4	352.0	381.8	403.0
70°	38.1	55.1	80.6	97.5	114.5	157.0	199.4	237.5	271.5	292.6	309.6
72.5°	29.8	38.1	55.1	67.9	80.6	110.2	144.2	173.9	199.4	216.4	233.2
75°	17.0	25.5	38.1	46.6	55.1	76.4	97.5	118.8	135.8	148.5	157.0
77.5°	8.5	12.8	21.2	25.5	33.9	46.6	63.6	76.4	89.1	97.5	106.0
80°	8.5	8.5	12.8	12.8	17.0	25.5	33.9	42.4	50.9	59.4	63.6
82.5°	4.2	4.2	8.5	8.5	8.5	12.8	17.0	25.5	29.8	33.9	38.1
85°	4.2	4.2	4.2	4.2	4.2	8.5	8.5	12.8	17.0	21.2	21.2
87.5°	0.0	0.0	4.2	4.2	4.2	4.2	4.2	8.5	8.5	8.5	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



TEST NUMBER: P252629

CATALOG NUMBER: LE_6B60D010R EC6B60709030 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0	3669.0
2.5°	3656.4	3664.9	3660.6	3669.0	3656.4	3652.1	3660.6	3647.9
5°	3609.6	3613.9	3609.6	3609.6	3601.2	3592.8	3601.2	3588.5
7.5°	3537.6	3537.6	3524.9	3524.9	3507.9	3499.4	3499.4	3495.1
10°	3478.1	3465.5	3452.8	3457.0	3431.5	3423.0	3418.8	3414.5
12.5°	3448.5	3440.0	3418.8	3418.8	3393.4	3384.9	3380.6	3376.4
15°	3414.5	3397.6	3380.6	3376.4	3355.1	3346.8	3342.5	3334.0
17.5°	3355.1	3342.5	3321.2	3321.2	3300.0	3295.8	3287.2	3283.1
20°	3291.5	3274.6	3257.6	3257.6	3232.1	3232.1	3219.5	3223.6
22.5°	3202.5	3189.8	3172.8	3172.8	3151.6	3147.4	3134.6	3130.4
25°	3096.4	3079.5	3066.8	3062.5	3045.5	3037.0	3032.8	3024.4
27.5°	2956.5	2943.8	2931.0	2922.5	2901.4	2897.1	2884.4	2888.6
30°	2782.5	2774.0	2769.9	2761.4	2735.9	2727.4	2727.4	2714.6
32.5°	2591.6	2579.0	2570.5	2557.8	2536.5	2532.2	2519.5	2523.8
35°	2358.4	2341.4	2328.6	2332.9	2307.5	2303.2	2294.8	2299.0
37.5°	2116.6	2099.6	2082.6	2078.4	2057.2	2057.2	2044.5	2044.5
40°	1866.4	1849.4	1840.9	1840.9	1815.5	1819.6	1807.0	1802.8
42.5°	1641.5	1624.6	1620.4	1616.1	1603.4	1599.1	1586.4	1590.6
45°	1429.5	1425.2	1425.2	1416.8	1404.0	1399.8	1404.0	1404.0
47.5°	1242.9	1247.0	1242.9	1242.9	1234.4	1242.9	1234.4	1238.6
50°	1085.9	1094.4	1094.4	1094.4	1090.1	1094.4	1094.4	1098.6
52.5°	954.4	967.1	962.9	967.1	962.9	971.4	967.1	971.4
55°	839.9	848.4	852.6	856.9	856.9	856.9	856.9	856.9
57.5°	733.8	746.5	750.8	755.0	755.0	763.5	755.0	755.0
60°	649.0	661.8	666.0	670.1	670.1	674.4	666.0	670.1
62.5°	572.6	585.4	585.4	589.6	589.6	589.6	581.1	585.4
65°	496.2	500.5	504.8	504.8	500.5	500.5	496.2	500.5
67.5°	411.5	415.6	411.5	411.5	407.2	407.2	398.8	403.0
70°	318.1	318.1	322.4	318.1	313.9	318.1	313.9	309.6
72.5°	237.5	237.5	237.5	233.2	233.2	229.0	233.2	233.2
75°	161.1	161.1	165.4	165.4	165.4	165.4	161.1	161.1
77.5°	106.0	106.0	106.0	106.0	110.2	106.0	106.0	106.0
80°	67.9	67.9	72.1	72.1	67.9	67.9	67.9	67.9
82.5°	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
85°	25.5	25.5	25.5	25.5	21.2	21.2	21.2	21.2
87.5°	12.8	12.8	12.8	12.8	12.8	12.8	8.5	8.5
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)