

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: P252609

Luminaire Tested: **LE_6B50D010R EC6B30508027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252609
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_6B50D010R EC6B30508027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6371.2 lumens
Efficiency: N/A
Efficacy: 108.4 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

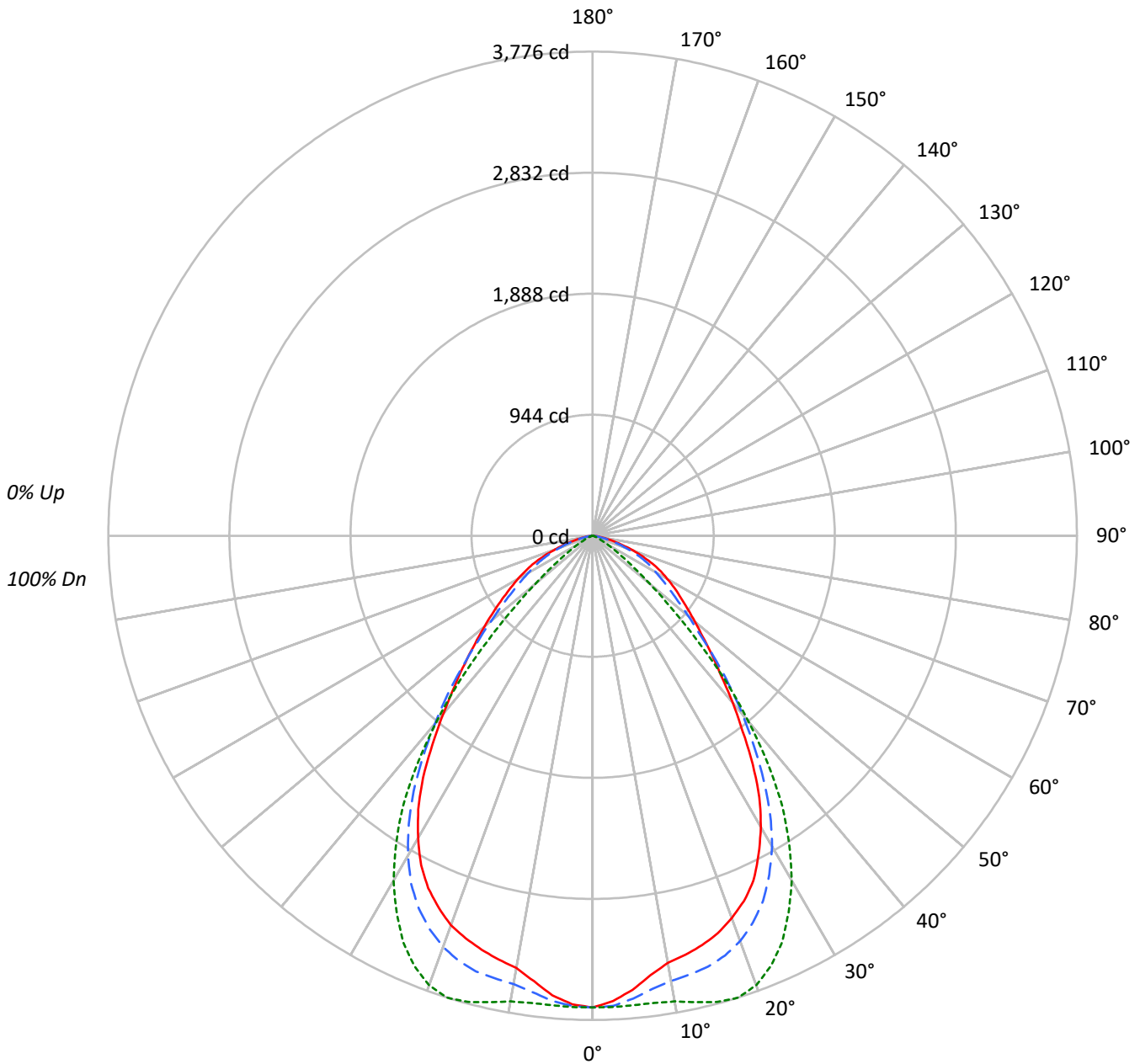
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79			79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70			70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56			56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50			50
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46			46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42			42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38			38
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35			35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	239988	239988	239988
5°	232823	240623	235606
10°	223968	244253	226777
15°	223172	254195	225759
20°	220252	258930	224383
25°	213666	251631	218259
30°	197660	233865	205027
35°	173401	205577	183572
40°	144509	161167	153928
45°	121623	106325	129871
50°	105313	58269	111788
55°	95294	30950	97706
60°	87670	16101	87670
65°	79425	8521	77464
70°	64092	4864	59209
75°	43961	3227	40735
80°	28741	1578	25548
85°	19088	3144	15869



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.0	5.4
10°-20°	991.8	15.6
20°-30°	1465.5	23.0
30°-40°	1480.2	23.2
40°-50°	1020.2	16.0
50°-60°	586.0	9.2
60°-70°	341.0	5.4
70°-80°	124.4	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°	2800.3	44.0
0°-40°	4280.5	67.2
0°-60°	5886.8	92.4
0°-90°	6371.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6371.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3678	3678	3678	3678	3678	
5°	3555	3623	3674	3640	3598	334
15°	3304	3479	3764	3517	3342	931
25°	2968	3143	3496	3206	3032	1352
35°	2177	2326	2581	2432	2305	1351
45°	1318	1335	1152	1420	1408	1025
55°	838	736	272	766	859	754
65°	514	434	55	430	502	504
75°	174	140	13	136	162	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°	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5
2.5°	3631.6	3635.9	3640.1	3635.9	3640.1	3657.1	3644.4	3652.9	3652.9	3657.1	3669.9
5°	3555.1	3555.1	3563.6	3559.4	3572.1	3589.1	3576.4	3589.1	3593.4	3601.9	3623.1
7.5°	3457.2	3457.2	3461.5	3461.5	3478.6	3495.6	3487.1	3504.1	3521.1	3538.1	3563.6
10°	3380.8	3389.2	3389.2	3393.5	3410.5	3431.8	3427.5	3448.8	3465.9	3491.4	3525.4
12.5°	3346.8	3351.0	3351.0	3359.5	3376.5	3397.8	3393.5	3414.8	3440.2	3470.1	3504.1
15°	3304.2	3312.8	3308.5	3317.0	3334.0	3355.2	3351.0	3372.2	3402.0	3431.8	3478.6
17.5°	3248.9	3253.1	3257.5	3257.5	3274.5	3291.5	3291.5	3312.8	3346.8	3380.8	3431.8
20°	3172.4	3180.9	3180.9	3185.1	3197.9	3223.4	3219.1	3240.4	3274.5	3308.5	3363.8
22.5°	3083.1	3087.4	3087.4	3091.6	3112.9	3125.6	3129.9	3146.9	3176.6	3214.9	3266.0
25°	2968.2	2972.5	2968.2	2981.0	2989.5	3015.0	3006.5	3027.8	3061.9	3091.6	3142.6
27.5°	2802.4	2810.9	2810.9	2815.1	2836.5	2857.8	2857.8	2879.0	2908.8	2930.0	2981.0
30°	2623.8	2636.6	2623.8	2645.1	2653.6	2670.6	2683.4	2696.1	2721.6	2751.4	2798.1
32.5°	2419.8	2415.5	2419.8	2428.2	2453.8	2466.5	2475.0	2487.8	2513.2	2538.8	2577.0
35°	2177.2	2185.8	2190.0	2207.1	2207.1	2228.4	2232.6	2241.1	2279.4	2296.4	2326.1
37.5°	1922.1	1930.6	1934.9	1943.4	1960.4	1968.9	1981.6	1994.4	2020.0	2049.8	2066.8
40°	1696.8	1696.8	1701.0	1709.5	1722.2	1726.5	1739.2	1756.2	1773.2	1798.9	1815.9
42.5°	1484.1	1488.4	1484.1	1492.6	1505.4	1522.4	1518.1	1539.4	1543.6	1560.6	1573.4
45°	1318.2	1318.2	1309.8	1318.2	1318.2	1335.2	1331.0	1339.5	1335.2	1343.8	1335.2
47.5°	1161.0	1165.2	1161.0	1165.2	1165.2	1165.2	1169.5	1161.0	1165.2	1152.4	1126.9
50°	1037.6	1041.9	1033.4	1037.6	1033.4	1029.1	1033.4	1020.6	1016.4	999.4	973.9
52.5°	931.2	927.0	922.8	922.8	922.8	918.5	914.2	901.5	888.8	871.8	842.0
55°	837.8	833.5	829.2	829.2	820.8	816.5	816.5	803.8	791.0	769.8	735.8
57.5°	752.8	748.5	744.2	744.2	740.0	731.4	731.4	718.6	701.6	676.1	646.4
60°	671.9	671.9	671.9	667.6	667.6	659.1	659.1	646.4	629.4	603.9	569.9
62.5°	599.6	595.4	595.4	595.4	595.4	591.1	586.9	578.4	561.4	535.9	506.0
65°	514.5	514.5	514.5	514.5	510.2	510.2	510.2	497.5	489.0	463.5	433.8
67.5°	421.0	421.0	421.0	421.0	416.8	421.0	421.0	412.5	404.0	378.5	353.0
70°	336.0	331.8	327.5	331.8	327.5	327.5	331.8	323.2	319.0	297.6	272.1
72.5°	246.6	250.9	246.6	246.6	246.6	242.4	246.6	242.4	233.9	216.9	199.9
75°	174.4	178.6	178.6	174.4	174.4	174.4	170.1	170.1	161.6	148.9	140.4
77.5°	119.1	119.1	119.1	119.1	114.9	114.9	114.9	110.6	106.4	97.8	89.2
80°	76.5	76.5	76.5	76.5	72.2	72.2	72.2	68.0	68.0	59.5	51.0
82.5°	46.8	46.8	46.8	46.8	46.8	46.8	42.5	42.5	38.2	34.0	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°	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5
2.5°	3661.4	3665.6	3665.6	3665.6	3678.5	3682.8	3669.9	3657.1	3682.8	3678.5	3687.0
5°	3618.9	3631.6	3640.1	3644.4	3657.1	3665.6	3652.9	3648.6	3669.9	3674.2	3678.5
7.5°	3567.9	3589.1	3610.4	3618.9	3635.9	3644.4	3640.1	3640.1	3665.6	3674.2	3674.2
10°	3533.9	3563.6	3589.1	3610.4	3631.6	3644.4	3644.4	3648.6	3678.5	3687.0	3695.5
12.5°	3525.4	3563.6	3597.6	3627.4	3644.4	3665.6	3669.9	3682.8	3712.5	3725.2	3725.2
15°	3504.1	3555.1	3597.6	3635.9	3661.4	3687.0	3695.5	3721.0	3755.0	3763.5	3772.0
17.5°	3465.9	3516.9	3567.9	3614.6	3648.6	3669.9	3695.5	3721.0	3763.5	3776.2	3780.5
20°	3397.8	3457.2	3508.4	3555.1	3589.1	3618.9	3644.4	3674.2	3712.5	3729.5	3733.8
22.5°	3295.8	3355.2	3406.2	3457.2	3491.4	3516.9	3542.4	3576.4	3614.6	3631.6	3631.6
25°	3172.4	3227.6	3283.0	3321.2	3355.2	3385.0	3397.8	3436.0	3474.4	3495.6	3495.6
27.5°	3015.0	3066.1	3117.1	3159.6	3180.9	3206.4	3227.6	3261.8	3291.5	3308.5	3325.5
30°	2815.1	2866.2	2913.0	2955.5	2981.0	3006.5	3027.8	3053.4	3083.1	3104.4	3108.6
32.5°	2598.2	2640.9	2687.6	2730.1	2755.6	2764.1	2785.4	2810.9	2836.5	2853.5	2857.8
35°	2360.1	2389.9	2419.8	2458.0	2483.5	2483.5	2504.8	2521.8	2543.0	2581.2	2572.8
37.5°	2079.5	2122.0	2143.2	2156.0	2173.0	2190.0	2194.2	2215.6	2241.1	2249.6	2262.4
40°	1815.9	1828.6	1841.4	1841.4	1858.4	1858.4	1858.4	1862.6	1888.1	1892.4	1909.4
42.5°	1552.1	1552.1	1539.4	1526.6	1530.9	1526.6	1505.4	1505.4	1518.1	1535.1	1535.1
45°	1305.5	1275.8	1237.5	1207.8	1186.5	1178.0	1152.4	1152.4	1148.1	1152.4	1169.5
47.5°	1097.1	1046.1	982.4	922.8	901.5	884.5	846.2	829.2	820.8	825.0	833.5
50°	922.8	867.5	795.2	722.9	684.6	663.4	616.6	586.9	582.6	574.1	591.1
52.5°	795.2	727.1	650.6	565.6	527.4	493.2	442.2	416.8	399.8	399.8	404.0
55°	684.6	612.4	527.4	442.2	404.0	378.5	327.5	293.4	276.4	272.1	284.9
57.5°	591.1	523.0	438.0	353.0	314.6	284.9	233.9	204.1	191.4	182.9	187.1
60°	518.8	450.8	365.8	284.9	250.9	216.9	174.4	140.4	123.4	123.4	127.6
62.5°	450.8	387.0	310.4	233.9	204.1	174.4	127.6	97.8	85.0	80.8	85.0
65°	382.8	323.2	259.4	195.6	165.9	140.4	102.0	76.5	59.5	55.2	59.5
67.5°	310.4	263.6	208.4	157.4	131.9	110.6	76.5	55.2	42.5	38.2	42.5
70°	242.4	199.9	157.4	114.9	97.8	80.8	55.2	42.5	29.8	25.5	29.8
72.5°	174.4	144.6	110.6	80.8	68.0	55.2	38.2	29.8	21.2	17.0	21.2
75°	119.1	97.8	72.2	51.0	42.5	38.2	25.5	17.0	12.8	12.8	12.8
77.5°	76.5	59.5	46.8	34.0	25.5	21.2	12.8	8.5	8.5	8.5	8.5
80°	42.5	34.0	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°	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5
2.5°	3669.9	3674.2	3661.4	3678.5	3665.6	3682.8	3682.8	3665.6	3669.9	3661.4	3678.5
5°	3661.4	3661.4	3652.9	3665.6	3648.6	3665.6	3661.4	3631.6	3640.1	3623.1	3640.1
7.5°	3661.4	3652.9	3640.1	3652.9	3631.6	3644.4	3627.4	3597.6	3589.1	3567.9	3567.9
10°	3674.2	3661.4	3644.4	3648.6	3627.4	3631.6	3606.1	3563.6	3550.9	3525.4	3516.9
12.5°	3704.0	3691.2	3665.6	3674.2	3644.4	3644.4	3610.4	3559.4	3533.9	3499.9	3491.4
15°	3746.5	3725.2	3695.5	3699.8	3669.9	3652.9	3610.4	3550.9	3516.9	3470.1	3457.2
17.5°	3755.0	3733.8	3695.5	3695.5	3657.1	3635.9	3584.9	3516.9	3474.4	3427.5	3402.0
20°	3708.2	3687.0	3644.4	3640.1	3606.1	3576.4	3521.1	3453.0	3410.5	3359.5	3338.2
22.5°	3610.4	3584.9	3546.6	3542.4	3508.4	3491.4	3431.8	3363.8	3321.2	3270.2	3253.1
25°	3465.9	3453.0	3414.8	3410.5	3380.8	3359.5	3308.5	3244.6	3206.4	3155.4	3138.4
27.5°	3295.8	3283.0	3244.6	3244.6	3210.6	3197.9	3151.1	3091.6	3061.9	3015.0	2993.8
30°	3091.6	3074.6	3053.4	3049.1	3019.2	3006.5	2964.0	2908.8	2879.0	2840.8	2832.1
32.5°	2849.2	2836.5	2823.6	2819.4	2789.6	2776.9	2747.1	2691.9	2666.4	2632.4	2619.5
35°	2568.5	2560.0	2547.2	2543.0	2530.2	2517.5	2487.8	2445.2	2432.5	2406.9	2394.1
37.5°	2245.4	2253.9	2245.4	2245.4	2232.6	2236.9	2211.4	2185.8	2173.0	2156.0	2147.5
40°	1896.6	1913.6	1926.4	1926.4	1922.1	1939.1	1934.9	1913.6	1909.4	1900.9	1896.6
42.5°	1543.6	1552.1	1577.8	1594.8	1590.5	1633.0	1637.2	1654.2	1667.0	1658.5	1662.8
45°	1173.8	1199.2	1233.2	1250.2	1271.5	1326.8	1356.5	1390.6	1420.4	1437.4	1433.1
47.5°	846.2	876.0	914.2	939.8	978.1	1046.1	1122.6	1165.2	1207.8	1229.0	1250.2
50°	612.4	642.1	688.9	727.1	752.8	846.2	927.0	982.4	1029.1	1058.9	1080.1
52.5°	429.5	463.5	514.5	548.6	586.9	676.1	769.8	833.5	884.5	922.8	944.0
55°	297.6	336.0	382.8	416.8	459.2	552.9	642.1	710.1	765.5	799.5	825.0
57.5°	208.4	242.4	289.1	319.0	361.5	450.8	540.1	608.1	663.4	697.4	727.1
60°	140.4	174.4	221.1	250.9	284.9	374.2	455.0	527.4	578.4	612.4	642.1
62.5°	97.8	127.6	174.4	204.1	233.9	310.4	387.0	450.8	501.8	540.1	565.6
65°	76.5	102.0	140.4	165.9	195.6	259.4	323.2	378.5	429.5	467.8	484.8
67.5°	55.2	80.8	110.6	131.9	153.1	208.4	263.6	306.1	353.0	382.8	404.0
70°	38.2	55.2	80.8	97.8	114.9	157.4	199.9	238.1	272.1	293.4	310.4
72.5°	29.8	38.2	55.2	68.0	80.8	110.6	144.6	174.4	199.9	216.9	233.9
75°	17.0	25.5	38.2	46.8	55.2	76.5	97.8	119.1	136.1	148.9	157.4
77.5°	8.5	12.8	21.2	25.5	34.0	46.8	63.8	76.5	89.2	97.8	106.4
80°	8.5	8.5	12.8	12.8	17.0	25.5	34.0	42.5	51.0	59.5	63.8
82.5°	4.2	4.2	8.5	8.5	8.5	12.8	17.0	25.5	29.8	34.0	38.2
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: P252609

CATALOG NUMBER: LE_6B50D010R EC6B30508027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5	3678.5
2.5°	3665.6	3674.2	3669.9	3678.5	3665.6	3661.4	3669.9	3657.1
5°	3618.9	3623.1	3618.9	3618.9	3610.4	3601.9	3610.4	3597.6
7.5°	3546.6	3546.6	3533.9	3533.9	3516.9	3508.4	3508.4	3504.1
10°	3487.1	3474.4	3461.5	3465.9	3440.2	3431.8	3427.5	3423.2
12.5°	3457.2	3448.8	3427.5	3427.5	3402.0	3393.5	3389.2	3385.0
15°	3423.2	3406.2	3389.2	3385.0	3363.8	3355.2	3351.0	3342.5
17.5°	3363.8	3351.0	3329.8	3329.8	3308.5	3304.2	3295.8	3291.5
20°	3300.0	3283.0	3266.0	3266.0	3240.4	3240.4	3227.6	3231.9
22.5°	3210.6	3197.9	3180.9	3180.9	3159.6	3155.4	3142.6	3138.4
25°	3104.4	3087.4	3074.6	3070.4	3053.4	3044.9	3040.5	3032.0
27.5°	2964.0	2951.2	2938.5	2930.0	2908.8	2904.5	2891.8	2896.0
30°	2789.6	2781.1	2776.9	2768.4	2742.9	2734.4	2734.4	2721.6
32.5°	2598.2	2585.5	2577.0	2564.2	2543.0	2538.8	2526.0	2530.2
35°	2364.4	2347.4	2334.6	2338.9	2313.4	2309.1	2300.6	2304.9
37.5°	2122.0	2105.0	2088.0	2083.8	2062.5	2062.5	2049.8	2049.8
40°	1871.1	1854.1	1845.6	1845.6	1820.1	1824.4	1811.6	1807.4
42.5°	1645.8	1628.8	1624.5	1620.2	1607.5	1603.2	1590.5	1594.8
45°	1433.1	1428.9	1428.9	1420.4	1407.6	1403.4	1407.6	1407.6
47.5°	1246.0	1250.2	1246.0	1246.0	1237.5	1246.0	1237.5	1241.8
50°	1088.6	1097.1	1097.1	1097.1	1092.9	1097.1	1097.1	1101.4
52.5°	956.9	969.6	965.4	969.6	965.4	973.9	969.6	973.9
55°	842.0	850.5	854.8	859.0	859.0	859.0	859.0	859.0
57.5°	735.8	748.5	752.8	757.0	757.0	765.5	757.0	757.0
60°	650.6	663.4	667.6	671.9	671.9	676.1	667.6	671.9
62.5°	574.1	586.9	586.9	591.1	591.1	591.1	582.6	586.9
65°	497.5	501.8	506.0	506.0	501.8	501.8	497.5	501.8
67.5°	412.5	416.8	412.5	412.5	408.2	408.2	399.8	404.0
70°	319.0	319.0	323.2	319.0	314.6	319.0	314.6	310.4
72.5°	238.1	238.1	238.1	233.9	233.9	229.6	233.9	233.9
75°	161.6	161.6	165.9	165.9	165.9	165.9	161.6	161.6
77.5°	106.4	106.4	106.4	106.4	110.6	106.4	106.4	106.4
80°	68.0	68.0	72.2	72.2	68.0	68.0	68.0	68.0
82.5°	42.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
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)