

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: P252632

Luminaire Tested: **LE_6B60D010R EC6B60709050 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252632
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 EC6B60709050 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6485.0 lumens
Efficiency: N/A
Efficacy: 103.8 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

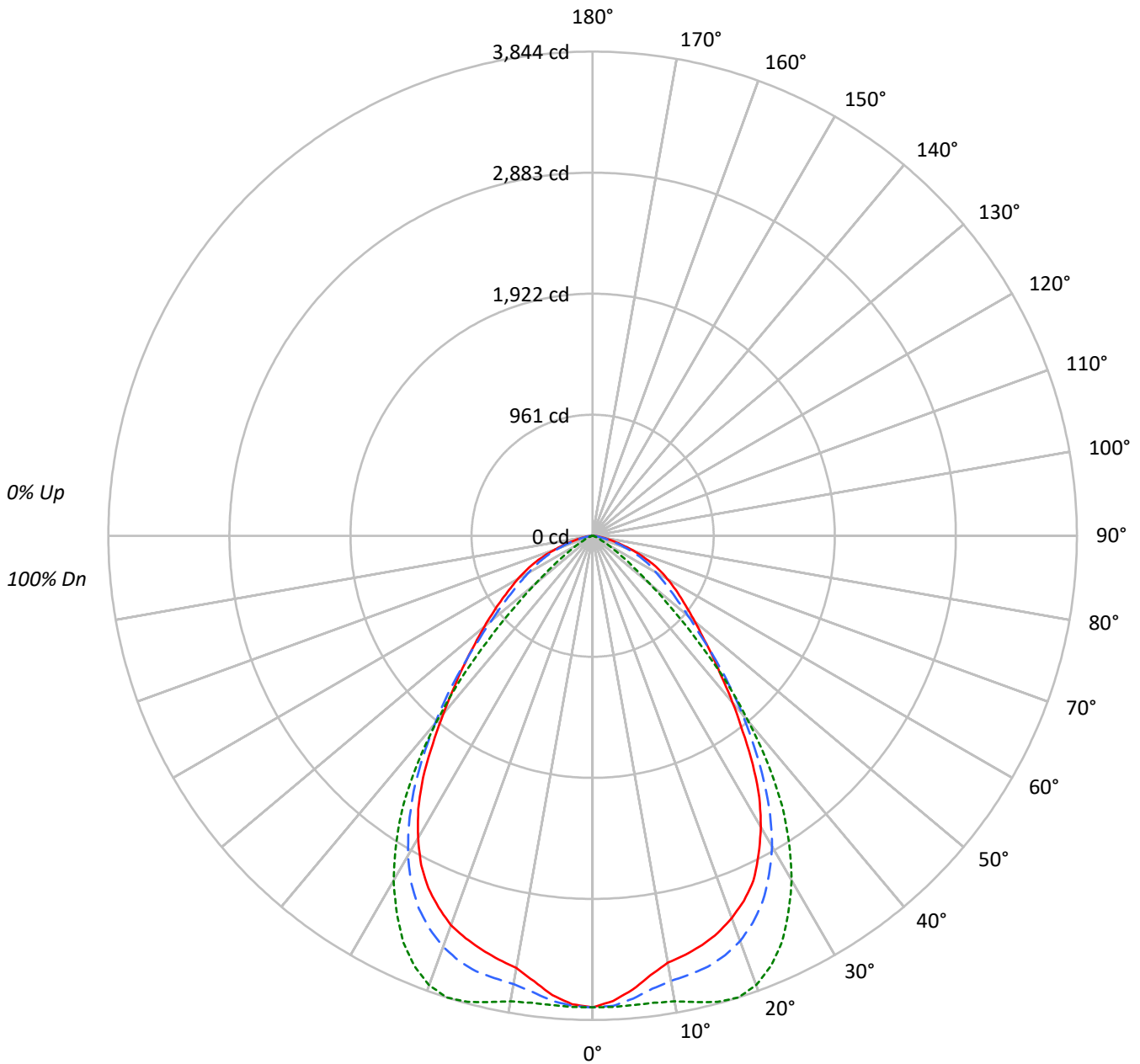
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252632

CATALOG NUMBER: LE_6B60D010R EC6B60709050 6LBDW1LI

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°	244267	244267	244267
5°	236982	244919	239817
10°	227963	248612	230831
15°	227157	258727	229785
20°	224182	263547	228389
25°	217481	256123	222160
30°	201185	238038	208689
35°	176499	209257	186845
40°	147081	164037	156671
45°	123809	108226	132196
50°	107190	59314	113788
55°	97001	31507	99457
60°	89236	16375	89236
65°	80860	8676	78853
70°	65237	4960	60277
75°	44743	3277	41466
80°	29267	1653	25999
85°	19462	3294	16169



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.1	5.4
10°-20°	1009.6	15.6
20°-30°	1491.6	23.0
30°-40°	1506.7	23.2
40°-50°	1038.5	16.0
50°-60°	596.4	9.2
60°-70°	347.1	5.4
70°-80°	126.6	2.0
80°-90°	19.4	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°	2850.3	44.0
0°-40°	4357.0	67.2
0°-60°	5991.9	92.4
0°-90°	6485.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6485.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3744	3744	3744	3744	3744	
5°	3619	3688	3740	3705	3662	339
15°	3363	3541	3831	3580	3402	947
25°	3021	3199	3558	3264	3086	1377
35°	2216	2368	2627	2476	2346	1376
45°	1342	1359	1173	1446	1433	1043
55°	853	749	277	779	874	768
65°	524	442	56	437	511	513
75°	178	143	13	138	164	200
85°	26	13	4	17	22	33
90°	0	0	0	0	0	



TEST NUMBER: P252632

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1
2.5°	3696.5	3700.9	3705.1	3700.9	3705.1	3722.5	3709.5	3718.1	3718.1	3722.5	3735.5
5°	3618.6	3618.6	3627.2	3622.9	3635.9	3653.2	3640.2	3653.2	3657.5	3666.2	3687.9
7.5°	3519.0	3519.0	3523.4	3523.4	3540.6	3558.0	3549.4	3566.6	3584.0	3601.2	3627.2
10°	3441.1	3449.8	3449.8	3454.1	3471.4	3493.1	3488.8	3510.4	3527.8	3553.6	3588.2
12.5°	3406.5	3410.9	3410.9	3419.5	3436.8	3458.4	3454.1	3475.8	3501.8	3532.0	3566.6
15°	3363.2	3371.9	3367.5	3376.2	3393.5	3415.1	3410.9	3432.5	3462.8	3493.1	3540.6
17.5°	3307.0	3311.2	3315.6	3315.6	3332.9	3350.2	3350.2	3371.9	3406.5	3441.1	3493.1
20°	3229.0	3237.6	3237.6	3242.0	3255.0	3281.0	3276.6	3298.2	3332.9	3367.5	3423.8
22.5°	3138.1	3142.5	3142.5	3146.8	3168.4	3181.4	3185.8	3203.0	3233.4	3272.2	3324.2
25°	3021.2	3025.6	3021.2	3034.2	3042.9	3068.9	3060.2	3081.9	3116.5	3146.8	3198.8
27.5°	2852.5	2861.1	2861.1	2865.4	2887.1	2908.8	2908.8	2930.4	2960.6	2982.2	3034.2
30°	2670.6	2683.6	2670.6	2692.2	2701.0	2718.2	2731.2	2744.2	2770.2	2800.5	2848.1
32.5°	2462.9	2458.5	2462.9	2471.5	2497.5	2510.5	2519.1	2532.1	2558.1	2584.1	2623.0
35°	2216.1	2224.9	2229.1	2246.5	2246.5	2268.1	2272.5	2281.1	2320.0	2337.4	2367.6
37.5°	1956.5	1965.1	1969.5	1978.1	1995.4	2004.1	2017.0	2030.0	2056.0	2086.4	2103.6
40°	1727.0	1727.0	1731.4	1740.0	1753.0	1757.4	1770.4	1787.6	1805.0	1830.9	1848.2
42.5°	1510.6	1515.0	1510.6	1519.2	1532.2	1549.6	1545.2	1566.9	1571.2	1588.5	1601.5
45°	1341.9	1341.9	1333.1	1341.9	1341.9	1359.1	1354.8	1363.5	1359.1	1367.8	1359.1
47.5°	1181.6	1186.0	1181.6	1186.0	1186.0	1186.0	1190.4	1181.6	1186.0	1173.0	1147.0
50°	1056.1	1060.5	1051.9	1056.1	1051.9	1047.5	1051.9	1038.9	1034.5	1017.1	991.2
52.5°	947.9	943.6	939.2	939.2	939.2	935.0	930.6	917.6	904.6	887.4	857.0
55°	852.8	848.4	844.0	844.0	835.4	831.1	831.1	818.1	805.1	783.5	748.9
57.5°	766.1	761.8	757.5	757.5	753.1	744.5	744.5	731.5	714.2	688.2	657.9
60°	683.9	683.9	683.9	679.6	679.6	670.9	670.9	657.9	640.6	614.6	580.0
62.5°	610.2	606.0	606.0	606.0	606.0	601.6	597.4	588.6	571.4	545.4	515.1
65°	523.8	523.8	523.8	523.8	519.4	519.4	519.4	506.4	497.8	471.8	441.5
67.5°	428.5	428.5	428.5	428.5	424.2	428.5	428.5	419.9	411.2	385.2	359.2
70°	342.0	337.6	333.2	337.6	333.2	333.2	337.6	329.0	324.6	303.0	277.0
72.5°	251.0	255.4	251.0	251.0	251.0	246.8	251.0	246.8	238.1	220.8	203.4
75°	177.5	181.8	181.8	177.5	177.5	177.5	173.1	173.1	164.5	151.5	142.9
77.5°	121.2	121.2	121.2	121.2	116.9	116.9	116.9	112.5	108.2	99.5	90.9
80°	77.9	77.9	77.9	77.9	73.6	73.6	73.6	69.2	69.2	60.6	52.0
82.5°	47.6	47.6	47.6	47.6	47.6	47.6	43.2	43.2	39.0	34.6	30.2
85°	26.0	26.0	26.0	26.0	26.0	26.0	26.0	21.6	21.6	17.4	13.0
87.5°	8.6	8.6	13.0	13.0	13.0	13.0	13.0	13.0	8.6	8.6	8.6
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: P252632

CATALOG NUMBER: LE_6B60D010R EC6B60709050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1
2.5°	3726.8	3731.1	3731.1	3731.1	3744.1	3748.5	3735.5	3722.5	3748.5	3744.1	3752.8
5°	3683.5	3696.5	3705.1	3709.5	3722.5	3731.1	3718.1	3713.9	3735.5	3739.8	3744.1
7.5°	3631.6	3653.2	3674.9	3683.5	3700.9	3709.5	3705.1	3705.1	3731.1	3739.8	3739.8
10°	3597.0	3627.2	3653.2	3674.9	3696.5	3709.5	3709.5	3713.9	3744.1	3752.8	3761.4
12.5°	3588.2	3627.2	3661.9	3692.1	3709.5	3731.1	3735.5	3748.5	3778.8	3791.8	3791.8
15°	3566.6	3618.6	3661.9	3700.9	3726.8	3752.8	3761.4	3787.4	3822.0	3830.6	3839.4
17.5°	3527.8	3579.6	3631.6	3679.1	3713.9	3735.5	3761.4	3787.4	3830.6	3843.6	3848.0
20°	3458.4	3519.0	3571.0	3618.6	3653.2	3683.5	3709.5	3739.8	3778.8	3796.0	3800.4
22.5°	3354.5	3415.1	3467.1	3519.0	3553.6	3579.6	3605.6	3640.2	3679.1	3696.5	3696.5
25°	3229.0	3285.2	3341.6	3380.5	3415.1	3445.5	3458.4	3497.4	3536.4	3558.0	3558.0
27.5°	3068.9	3120.9	3172.8	3216.0	3237.6	3263.6	3285.2	3319.9	3350.2	3367.5	3384.9
30°	2865.4	2917.4	2965.0	3008.2	3034.2	3060.2	3081.9	3107.9	3138.1	3159.8	3164.1
32.5°	2644.6	2688.0	2735.6	2778.9	2804.9	2813.5	2835.1	2861.1	2887.1	2904.4	2908.8
35°	2402.2	2432.6	2462.9	2501.9	2527.9	2527.9	2549.5	2566.8	2588.4	2627.4	2618.8
37.5°	2116.6	2159.9	2181.5	2194.5	2211.9	2229.1	2233.5	2255.1	2281.1	2289.8	2302.8
40°	1848.2	1861.2	1874.2	1874.2	1891.5	1891.5	1891.5	1895.9	1921.9	1926.1	1943.5
42.5°	1579.9	1579.9	1566.9	1553.9	1558.2	1553.9	1532.2	1532.2	1545.2	1562.6	1562.6
45°	1328.9	1298.5	1259.6	1229.2	1207.6	1199.0	1173.0	1173.0	1168.6	1173.0	1190.4
47.5°	1116.8	1064.8	999.9	939.2	917.6	900.4	861.4	844.0	835.4	839.8	848.4
50°	939.2	883.0	809.4	735.9	696.9	675.2	627.6	597.4	593.0	584.4	601.6
52.5°	809.4	740.1	662.2	575.6	536.8	502.1	450.1	424.2	406.9	406.9	411.2
55°	696.9	623.2	536.8	450.1	411.2	385.2	333.2	298.6	281.4	277.0	290.0
57.5°	601.6	532.4	445.9	359.2	320.2	290.0	238.1	207.8	194.8	186.1	190.5
60°	528.1	458.9	372.2	290.0	255.4	220.8	177.5	142.9	125.5	125.5	129.9
62.5°	458.9	393.9	316.0	238.1	207.8	177.5	129.9	99.5	86.6	82.2	86.6
65°	389.5	329.0	264.0	199.1	168.8	142.9	103.9	77.9	60.6	56.2	60.6
67.5°	316.0	268.4	212.1	160.1	134.1	112.5	77.9	56.2	43.2	39.0	43.2
70°	246.8	203.4	160.1	116.9	99.5	82.2	56.2	43.2	30.2	26.0	30.2
72.5°	177.5	147.1	112.5	82.2	69.2	56.2	39.0	30.2	21.6	17.4	21.6
75°	121.2	99.5	73.6	52.0	43.2	39.0	26.0	17.4	13.0	13.0	13.0
77.5°	77.9	60.6	47.6	34.6	26.0	21.6	13.0	8.6	8.6	8.6	8.6
80°	43.2	34.6	26.0	17.4	13.0	13.0	8.6	8.6	4.4	4.4	4.4
82.5°	26.0	17.4	13.0	8.6	8.6	4.4	4.4	4.4	4.4	4.4	4.4
85°	13.0	8.6	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
87.5°	4.4	4.4	4.4	4.4	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



TEST NUMBER: P252632

CATALOG NUMBER: LE_6B60D010R EC6B60709050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1
2.5°	3735.5	3739.8	3726.8	3744.1	3731.1	3748.5	3748.5	3731.1	3735.5	3726.8	3744.1
5°	3726.8	3726.8	3718.1	3731.1	3713.9	3731.1	3726.8	3696.5	3705.1	3687.9	3705.1
7.5°	3726.8	3718.1	3705.1	3718.1	3696.5	3709.5	3692.1	3661.9	3653.2	3631.6	3631.6
10°	3739.8	3726.8	3709.5	3713.9	3692.1	3696.5	3670.5	3627.2	3614.2	3588.2	3579.6
12.5°	3770.1	3757.1	3731.1	3739.8	3709.5	3709.5	3674.9	3622.9	3597.0	3562.4	3553.6
15°	3813.4	3791.8	3761.4	3765.8	3735.5	3718.1	3674.9	3614.2	3579.6	3532.0	3519.0
17.5°	3822.0	3800.4	3761.4	3761.4	3722.5	3700.9	3648.9	3579.6	3536.4	3488.8	3462.8
20°	3774.4	3752.8	3709.5	3705.1	3670.5	3640.2	3584.0	3514.8	3471.4	3419.5	3397.9
22.5°	3674.9	3648.9	3609.9	3605.6	3571.0	3553.6	3493.1	3423.8	3380.5	3328.6	3311.2
25°	3527.8	3514.8	3475.8	3471.4	3441.1	3419.5	3367.5	3302.6	3263.6	3211.8	3194.4
27.5°	3354.5	3341.6	3302.6	3302.6	3268.0	3255.0	3207.4	3146.8	3116.5	3068.9	3047.2
30°	3146.8	3129.5	3107.9	3103.5	3073.2	3060.2	3016.9	2960.6	2930.4	2891.4	2882.8
32.5°	2900.1	2887.1	2874.1	2869.8	2839.5	2826.5	2796.1	2739.9	2714.0	2679.4	2666.4
35°	2614.4	2605.8	2592.8	2588.4	2575.4	2562.5	2532.1	2488.9	2475.9	2449.9	2436.9
37.5°	2285.4	2294.1	2285.4	2285.4	2272.5	2276.8	2250.8	2224.9	2211.9	2194.5	2185.9
40°	1930.5	1947.8	1960.8	1960.8	1956.5	1973.8	1969.5	1947.8	1943.5	1934.9	1930.5
42.5°	1571.2	1579.9	1605.9	1623.1	1618.9	1662.1	1666.5	1683.8	1696.8	1688.1	1692.4
45°	1194.6	1220.6	1255.2	1272.6	1294.2	1350.5	1380.8	1415.4	1445.8	1463.0	1458.8
47.5°	861.4	891.6	930.6	956.6	995.5	1064.8	1142.8	1186.0	1229.2	1250.9	1272.6
50°	623.2	653.6	701.2	740.1	766.1	861.4	943.6	999.9	1047.5	1077.8	1099.4
52.5°	437.1	471.8	523.8	558.4	597.4	688.2	783.5	848.4	900.4	939.2	960.9
55°	303.0	342.0	389.5	424.2	467.5	562.8	653.6	722.9	779.1	813.8	839.8
57.5°	212.1	246.8	294.4	324.6	367.9	458.9	549.8	619.0	675.2	709.9	740.1
60°	142.9	177.5	225.1	255.4	290.0	380.9	463.1	536.8	588.6	623.2	653.6
62.5°	99.5	129.9	177.5	207.8	238.1	316.0	393.9	458.9	510.8	549.8	575.6
65°	77.9	103.9	142.9	168.8	199.1	264.0	329.0	385.2	437.1	476.1	493.5
67.5°	56.2	82.2	112.5	134.1	155.9	212.1	268.4	311.6	359.2	389.5	411.2
70°	39.0	56.2	82.2	99.5	116.9	160.1	203.4	242.4	277.0	298.6	316.0
72.5°	30.2	39.0	56.2	69.2	82.2	112.5	147.1	177.5	203.4	220.8	238.1
75°	17.4	26.0	39.0	47.6	56.2	77.9	99.5	121.2	138.5	151.5	160.1
77.5°	8.6	13.0	21.6	26.0	34.6	47.6	64.9	77.9	90.9	99.5	108.2
80°	8.6	8.6	13.0	13.0	17.4	26.0	34.6	43.2	52.0	60.6	64.9
82.5°	4.4	4.4	8.6	8.6	8.6	13.0	17.4	26.0	30.2	34.6	39.0
85°	4.4	4.4	4.4	4.4	4.4	8.6	8.6	13.0	17.4	21.6	21.6
87.5°	0.0	0.0	4.4	4.4	4.4	4.4	4.4	8.6	8.6	8.6	13.0
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: P252632

CATALOG NUMBER: LE_6B60D010R EC6B60709050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1
2.5°	3731.1	3739.8	3735.5	3744.1	3731.1	3726.8	3735.5	3722.5
5°	3683.5	3687.9	3683.5	3683.5	3674.9	3666.2	3674.9	3661.9
7.5°	3609.9	3609.9	3597.0	3597.0	3579.6	3571.0	3571.0	3566.6
10°	3549.4	3536.4	3523.4	3527.8	3501.8	3493.1	3488.8	3484.4
12.5°	3519.0	3510.4	3488.8	3488.8	3462.8	3454.1	3449.8	3445.5
15°	3484.4	3467.1	3449.8	3445.5	3423.8	3415.1	3410.9	3402.1
17.5°	3423.8	3410.9	3389.1	3389.1	3367.5	3363.2	3354.5	3350.2
20°	3358.9	3341.6	3324.2	3324.2	3298.2	3298.2	3285.2	3289.6
22.5°	3268.0	3255.0	3237.6	3237.6	3216.0	3211.8	3198.8	3194.4
25°	3159.8	3142.5	3129.5	3125.1	3107.9	3099.1	3094.9	3086.2
27.5°	3016.9	3004.0	2991.0	2982.2	2960.6	2956.4	2943.4	2947.6
30°	2839.5	2830.8	2826.5	2817.9	2791.9	2783.2	2783.2	2770.2
32.5°	2644.6	2631.8	2623.0	2610.0	2588.4	2584.1	2571.1	2575.4
35°	2406.6	2389.2	2376.4	2380.6	2354.6	2350.4	2341.8	2346.0
37.5°	2159.9	2142.6	2125.2	2121.0	2099.2	2099.2	2086.4	2086.4
40°	1904.5	1887.2	1878.5	1878.5	1852.6	1856.9	1843.9	1839.6
42.5°	1675.1	1657.8	1653.5	1649.1	1636.1	1631.9	1618.9	1623.1
45°	1458.8	1454.4	1454.4	1445.8	1432.8	1428.4	1432.8	1432.8
47.5°	1268.2	1272.6	1268.2	1268.2	1259.6	1268.2	1259.6	1263.9
50°	1108.1	1116.8	1116.8	1116.8	1112.4	1116.8	1116.8	1121.1
52.5°	973.9	986.9	982.5	986.9	982.5	991.2	986.9	991.2
55°	857.0	865.8	870.0	874.4	874.4	874.4	874.4	874.4
57.5°	748.9	761.8	766.1	770.5	770.5	779.1	770.5	770.5
60°	662.2	675.2	679.6	683.9	683.9	688.2	679.6	683.9
62.5°	584.4	597.4	597.4	601.6	601.6	601.6	593.0	597.4
65°	506.4	510.8	515.1	515.1	510.8	510.8	506.4	510.8
67.5°	419.9	424.2	419.9	419.9	415.5	415.5	406.9	411.2
70°	324.6	324.6	329.0	324.6	320.2	324.6	320.2	316.0
72.5°	242.4	242.4	242.4	238.1	238.1	233.8	238.1	238.1
75°	164.5	164.5	168.8	168.8	168.8	168.8	164.5	164.5
77.5°	108.2	108.2	108.2	108.2	112.5	108.2	108.2	108.2
80°	69.2	69.2	73.6	73.6	69.2	69.2	69.2	69.2
82.5°	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
85°	26.0	26.0	26.0	26.0	21.6	21.6	21.6	21.6
87.5°	13.0	13.0	13.0	13.0	13.0	13.0	8.6	8.6
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)