

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: P252182

Luminaire Tested: **LE_6B40D010 EC6B30508035 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30508035 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6812.5 lumens
Efficiency: N/A
Efficacy: 158.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

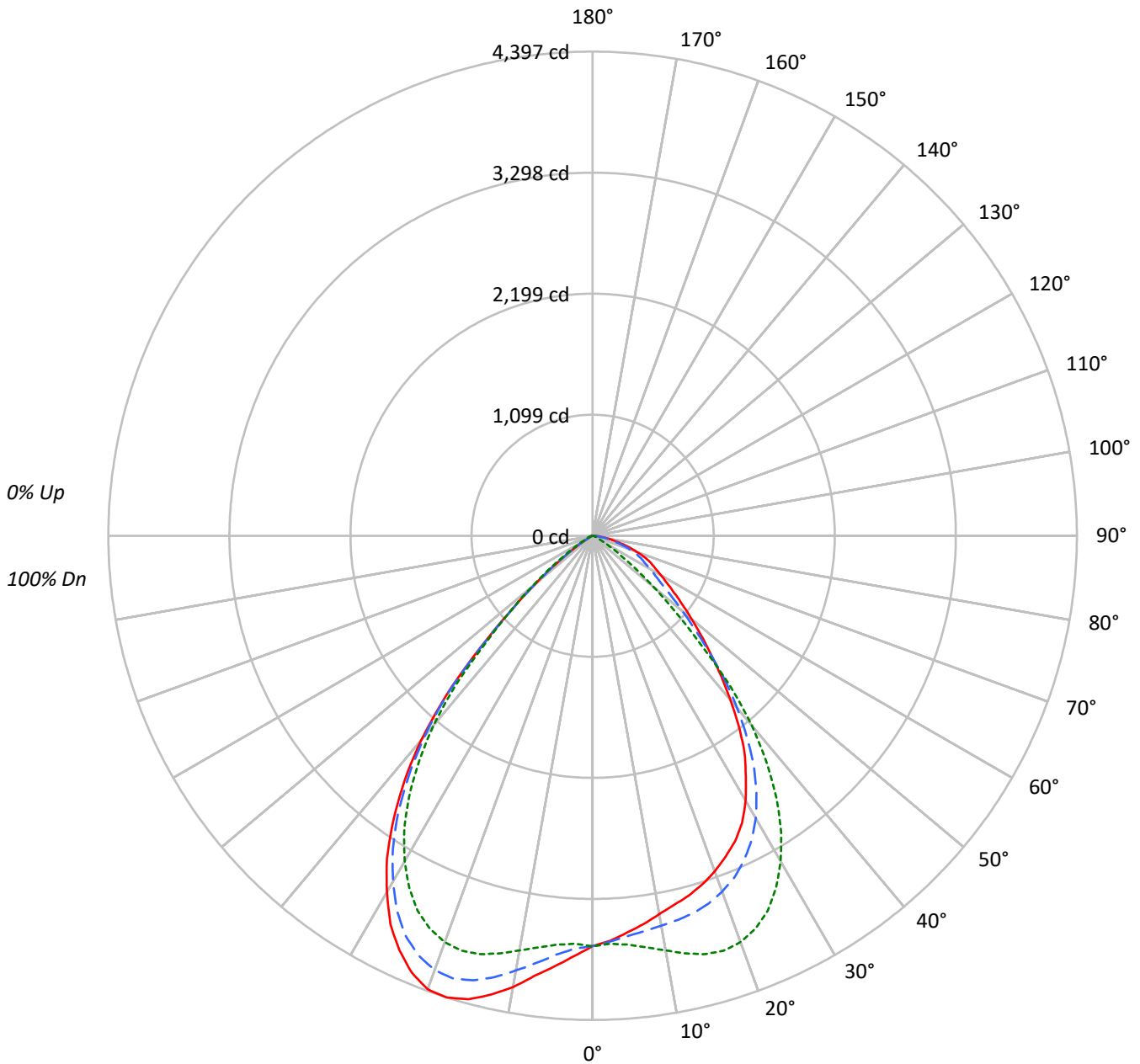
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	243152	243152	243152
5°	236844	244081	256917
10°	231083	253269	275694
15°	228387	265683	294321
20°	225112	272608	304274
25°	220317	270592	298810
30°	209367	257143	281302
35°	191552	231844	251150
40°	165690	191469	206050
45°	139706	125581	134789
50°	118629	72682	68348
55°	102938	34851	26343
60°	92981	16284	6511
65°	90215	9355	2192
70°	80878	7477	2060
75°	66446	5394	907
80°	49556	2668	0
85°	42667	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.0	5.3
10°-20°	1097.1	16.1
20°-30°	1676.3	24.6
30°-40°	1753.3	25.7
40°-50°	1137.3	16.7
50°-60°	451.6	6.6
60°-70°	214.2	3.1
70°-80°	101.9	1.5
80°-90°	20.8	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°	3133.4	46.0
0°-40°	4886.7	71.7
0°-60°	6475.6	95.1
0°-90°	6812.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6812.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3727	3727	3727	3727	3727	
5°	3616	3649	3727	3820	3923	341
15°	3381	3545	3934	4180	4358	953
25°	3061	3253	3759	4012	4151	1402
35°	2405	2551	2911	3082	3153	1487
45°	1514	1500	1361	1443	1461	1178
55°	905	770	306	239	232	820
65°	584	485	61	14	14	571
75°	264	214	21	7	4	284
85°	57	36	0	0	0	66
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°	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0
2.5°	3680.6	3687.8	3648.6	3637.9	3666.4	3677.1	3680.6	3670.0	3673.5	3687.8	3687.8
5°	3616.5	3623.6	3588.0	3577.4	3605.9	3613.0	3623.6	3620.1	3630.8	3652.1	3648.6
7.5°	3556.0	3566.6	3527.5	3513.2	3548.9	3566.6	3573.8	3573.8	3588.0	3616.5	3620.1
10°	3488.2	3502.5	3466.9	3459.8	3499.0	3516.8	3520.4	3527.5	3548.9	3588.0	3595.1
12.5°	3431.2	3445.5	3420.5	3409.9	3452.6	3470.4	3477.5	3491.8	3516.8	3566.6	3573.8
15°	3381.4	3392.0	3363.5	3356.4	3399.1	3420.5	3424.1	3445.5	3477.5	3534.6	3545.2
17.5°	3317.2	3324.4	3303.0	3295.9	3338.6	3360.0	3363.5	3388.5	3427.6	3484.6	3502.5
20°	3242.4	3249.5	3228.1	3221.0	3263.8	3288.8	3292.2	3313.6	3360.0	3420.5	3438.4
22.5°	3153.4	3167.6	3142.6	3135.5	3178.2	3199.6	3210.4	3228.1	3274.5	3335.0	3360.0
25°	3060.6	3060.6	3042.9	3039.2	3078.5	3103.4	3099.9	3124.9	3171.1	3231.8	3253.1
27.5°	2939.5	2936.0	2918.1	2914.6	2957.4	2978.8	2971.6	2996.5	3039.2	3099.9	3121.2
30°	2779.2	2786.4	2761.4	2754.2	2789.9	2825.5	2822.0	2846.9	2889.6	2946.6	2960.9
32.5°	2586.8	2593.9	2590.4	2579.6	2611.8	2629.5	2640.2	2658.0	2693.6	2754.2	2768.5
35°	2405.1	2394.4	2380.1	2380.1	2412.2	2440.8	2430.0	2451.4	2487.0	2547.6	2551.1
37.5°	2180.6	2177.0	2169.9	2162.8	2198.4	2205.5	2209.1	2223.4	2255.4	2305.2	2298.1
40°	1945.5	1949.0	1945.5	1931.1	1952.6	1981.1	1977.5	1984.6	2013.1	2048.8	2038.1
42.5°	1724.5	1724.5	1724.5	1710.2	1735.2	1749.5	1756.6	1753.0	1760.1	1792.2	1778.0
45°	1514.2	1517.9	1514.2	1510.8	1514.2	1521.4	1514.2	1510.8	1510.8	1521.4	1500.0
47.5°	1332.6	1332.6	1321.9	1311.2	1321.9	1325.5	1314.8	1304.1	1300.5	1297.0	1261.4
50°	1168.8	1165.1	1161.5	1143.8	1154.4	1158.0	1143.8	1136.6	1122.4	1104.5	1061.8
52.5°	1026.1	1022.6	1019.0	1001.2	1008.4	1011.9	997.6	983.4	965.6	951.4	897.9
55°	905.0	901.5	901.5	890.8	883.6	890.8	876.5	865.9	840.9	823.1	769.6
57.5°	801.8	801.8	794.6	783.9	787.5	787.5	773.1	758.9	737.5	716.1	673.4
60°	712.6	712.6	712.6	701.9	701.9	701.9	694.8	680.5	662.8	641.4	598.6
62.5°	641.4	641.4	637.8	627.1	630.6	630.6	623.5	609.2	591.5	577.2	534.5
65°	584.4	584.4	584.4	573.6	573.6	577.2	570.1	555.9	541.6	523.8	484.6
67.5°	513.1	509.5	509.5	502.4	506.0	509.5	502.4	491.8	473.9	463.2	427.6
70°	424.0	427.6	431.1	420.5	424.0	424.0	420.5	409.8	399.1	388.4	356.2
72.5°	345.6	345.6	342.0	338.5	338.5	342.0	334.9	324.2	317.1	310.0	285.0
75°	263.6	260.1	263.6	256.5	256.5	256.5	249.4	245.9	242.2	231.6	213.8
77.5°	192.4	188.9	188.9	181.8	185.2	185.2	181.8	174.6	167.5	163.9	149.6
80°	131.9	131.9	131.9	128.2	128.2	124.8	124.8	121.1	114.0	110.5	103.4
82.5°	89.1	89.1	89.1	85.5	85.5	85.5	82.0	78.4	74.9	71.2	64.1
85°	57.0	57.0	57.0	53.5	53.5	53.5	49.9	49.9	46.4	42.8	35.6
87.5°	32.1	32.1	32.1	28.5	28.5	28.5	28.5	28.5	25.0	21.4	17.9
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°	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0
2.5°	3712.8	3662.9	3694.9	3694.9	3684.2	3712.8	3730.5	3744.8	3741.2	3709.1	3705.6
5°	3684.2	3641.5	3677.1	3680.6	3670.0	3709.1	3734.1	3751.9	3755.5	3727.0	3730.5
7.5°	3662.9	3627.2	3673.5	3687.8	3684.2	3719.9	3748.4	3776.9	3791.1	3769.8	3773.2
10°	3652.1	3623.6	3673.5	3694.9	3698.5	3737.6	3780.4	3819.6	3837.4	3823.1	3833.9
12.5°	3637.9	3620.1	3677.1	3709.1	3723.4	3762.6	3816.0	3862.4	3890.9	3883.8	3905.1
15°	3623.6	3609.4	3677.1	3723.4	3741.2	3776.9	3837.4	3905.1	3937.2	3933.6	3962.1
17.5°	3588.0	3584.5	3655.8	3705.6	3730.5	3773.2	3830.2	3912.2	3944.4	3951.5	3987.1
20°	3531.0	3531.0	3609.4	3662.9	3691.4	3730.5	3801.8	3880.1	3919.4	3926.5	3965.8
22.5°	3452.6	3459.8	3534.6	3588.0	3630.8	3659.2	3734.1	3816.0	3851.6	3862.4	3905.1
25°	3349.2	3356.4	3427.6	3481.1	3527.5	3559.5	3630.8	3705.6	3748.4	3759.0	3791.1
27.5°	3213.9	3228.1	3295.9	3349.2	3388.5	3409.9	3484.6	3563.1	3595.1	3605.9	3637.9
30°	3057.1	3060.6	3128.4	3174.8	3213.9	3231.8	3295.9	3377.8	3402.8	3413.4	3459.8
32.5°	2864.8	2861.1	2925.2	2968.0	3000.1	3021.5	3089.1	3142.6	3167.6	3185.4	3210.4
35°	2633.1	2629.5	2675.9	2725.8	2750.8	2757.9	2825.5	2882.5	2896.8	2911.0	2943.1
37.5°	2373.0	2373.0	2412.2	2437.1	2465.6	2476.4	2508.4	2572.5	2597.5	2593.9	2618.9
40°	2098.6	2084.4	2112.9	2137.9	2145.0	2148.5	2180.6	2230.5	2248.2	2248.2	2266.1
42.5°	1810.0	1788.6	1792.2	1806.5	1813.6	1788.6	1810.0	1842.1	1831.4	1845.6	1849.2
45°	1503.6	1471.5	1457.2	1425.2	1432.4	1407.4	1393.1	1400.2	1396.8	1361.1	1368.2
47.5°	1254.2	1197.2	1172.2	1125.9	1115.2	1086.8	1068.9	1036.9	1008.4	1008.4	990.5
50°	1044.0	987.0	937.1	883.6	865.9	840.9	801.8	758.9	737.5	716.1	698.4
52.5°	876.5	816.0	755.4	698.4	673.4	641.4	587.9	545.1	506.0	484.6	463.2
55°	741.1	673.4	609.2	548.8	516.6	484.6	431.1	381.2	334.9	306.4	288.6
57.5°	637.8	573.6	506.0	441.9	413.4	377.6	320.6	267.2	224.5	192.4	174.6
60°	563.0	498.9	438.2	370.5	342.0	306.4	245.9	196.0	153.2	124.8	103.4
62.5°	498.9	441.9	377.6	317.1	288.6	253.0	196.0	146.1	106.9	78.4	60.6
65°	452.5	395.5	342.0	281.5	256.5	220.9	167.5	121.1	85.5	60.6	42.8
67.5°	399.1	349.1	295.8	245.9	220.9	192.4	142.5	103.4	71.2	49.9	35.6
70°	334.9	295.8	249.4	203.1	185.2	160.4	117.6	85.5	57.0	39.2	28.5
72.5°	267.2	235.1	199.5	163.9	149.6	124.8	96.2	67.8	42.8	28.5	21.4
75°	203.1	178.1	149.6	124.8	110.5	96.2	71.2	49.9	32.1	21.4	14.2
77.5°	139.0	128.2	106.9	85.5	78.4	67.8	46.4	32.1	21.4	14.2	7.1
80°	96.2	85.5	71.2	57.0	49.9	42.8	28.5	21.4	10.8	7.1	3.6
82.5°	60.6	49.9	42.8	35.6	32.1	25.0	17.9	10.8	7.1	3.6	3.6
85°	32.1	28.5	25.0	17.9	17.9	14.2	10.8	7.1	3.6	0.0	0.0
87.5°	17.9	14.2	10.8	7.1	7.1	3.6	3.6	3.6	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°	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0
2.5°	3748.4	3748.4	3744.8	3787.5	3737.6	3787.5	3762.6	3787.5	3751.9	3748.4	3751.9
5°	3776.9	3787.5	3791.1	3830.2	3784.0	3844.5	3823.1	3844.5	3819.6	3826.8	3837.4
7.5°	3833.9	3851.6	3848.1	3898.0	3851.6	3919.4	3905.1	3937.2	3912.2	3919.4	3933.6
10°	3898.0	3919.4	3923.0	3972.9	3930.1	4012.0	3994.2	4029.9	4008.5	4019.1	4037.0
12.5°	3972.9	3997.8	4001.4	4058.4	4012.0	4097.5	4086.9	4122.5	4104.6	4115.4	4136.8
15°	4029.9	4065.5	4072.6	4129.6	4079.8	4168.8	4161.6	4208.0	4179.5	4197.2	4215.1
17.5°	4058.4	4090.4	4104.6	4158.1	4115.4	4204.4	4197.2	4236.5	4215.1	4232.9	4254.2
20°	4040.5	4079.8	4090.4	4143.9	4101.1	4190.1	4179.5	4218.6	4197.2	4211.5	4232.9
22.5°	3976.4	4015.6	4029.9	4079.8	4040.5	4122.5	4118.9	4154.5	4126.0	4143.9	4161.6
25°	3862.4	3905.1	3912.2	3958.6	3915.9	4001.4	3994.2	4033.4	4012.0	4022.8	4047.6
27.5°	3698.5	3748.4	3759.0	3798.2	3766.1	3837.4	3837.4	3869.5	3844.5	3844.5	3869.5
30°	3502.5	3552.4	3559.5	3591.6	3563.1	3627.2	3630.8	3662.9	3623.6	3645.0	3648.6
32.5°	3263.8	3295.9	3317.2	3345.8	3303.0	3384.9	3374.2	3399.1	3377.8	3377.8	3395.6
35°	2975.1	3014.4	3025.0	3060.6	3025.0	3089.1	3089.1	3103.4	3082.0	3082.0	3110.6
37.5°	2661.6	2690.1	2693.6	2729.4	2700.8	2754.2	2750.8	2761.4	2740.0	2754.2	2754.2
40°	2294.6	2316.0	2323.1	2341.0	2337.4	2376.6	2373.0	2380.1	2369.5	2373.0	2380.1
42.5°	1867.0	1895.5	1909.8	1924.0	1902.6	1956.1	1945.5	1956.1	1952.6	1956.1	1966.9
45°	1375.4	1396.8	1407.4	1411.0	1403.9	1435.9	1460.9	1439.5	1443.0	1435.9	1450.1
47.5°	994.1	997.6	990.5	1011.9	994.1	1008.4	1015.5	1019.0	997.6	994.1	1008.4
50°	680.5	698.4	673.4	684.1	680.5	694.8	687.6	691.2	669.9	680.5	673.4
52.5°	452.5	449.0	441.9	445.4	438.2	438.2	438.2	445.4	431.1	424.0	416.9
55°	274.4	267.2	253.0	249.4	249.4	253.0	245.9	238.8	238.8	235.1	235.1
57.5°	160.4	149.6	142.5	139.0	131.9	128.2	124.8	124.8	117.6	117.6	117.6
60°	89.1	78.4	71.2	64.1	64.1	60.6	57.0	53.5	53.5	53.5	49.9
62.5°	46.4	39.2	32.1	28.5	28.5	25.0	21.4	21.4	21.4	21.4	17.9
65°	32.1	25.0	21.4	17.9	17.9	14.2	14.2	14.2	14.2	14.2	14.2
67.5°	25.0	21.4	17.9	14.2	14.2	14.2	10.8	10.8	10.8	10.8	10.8
70°	21.4	14.2	14.2	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
72.5°	14.2	14.2	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
75°	10.8	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	0.0	0.0	0.0	0.0	0.0
80°	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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: P252182

CATALOG NUMBER: LE_6B40D010 EC6B30508035 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0	3727.0
2.5°	3784.0	3780.4	3784.0	3791.1	3776.9	3819.6	3798.2	3819.6
5°	3865.9	3869.5	3873.0	3883.8	3865.9	3919.4	3890.9	3923.0
7.5°	3972.9	3976.4	3980.0	3990.6	3980.0	4033.4	4001.4	4029.9
10°	4083.2	4090.4	4090.4	4108.2	4097.5	4147.4	4126.0	4161.6
12.5°	4186.6	4193.8	4200.9	4211.5	4204.4	4257.9	4240.0	4268.5
15°	4268.5	4282.9	4286.4	4300.6	4293.5	4350.5	4329.1	4357.6
17.5°	4307.8	4322.0	4322.0	4339.9	4332.8	4393.2	4364.8	4396.9
20°	4286.4	4297.1	4300.6	4318.5	4311.4	4371.9	4343.4	4382.6
22.5°	4218.6	4222.2	4225.8	4243.6	4240.0	4293.5	4268.5	4293.5
25°	4094.0	4104.6	4101.1	4115.4	4115.4	4158.1	4129.6	4151.0
27.5°	3915.9	3926.5	3926.5	3944.4	3930.1	3972.9	3944.4	3976.4
30°	3698.5	3709.1	3702.0	3716.2	3702.0	3744.8	3723.4	3734.1
32.5°	3438.4	3438.4	3441.9	3445.5	3438.4	3477.5	3456.1	3477.5
35°	3128.4	3135.5	3139.1	3142.6	3135.5	3164.0	3139.1	3153.4
37.5°	2779.2	2797.0	2793.5	2797.0	2786.4	2822.0	2800.6	2807.8
40°	2405.1	2405.1	2401.5	2408.6	2398.0	2426.5	2412.2	2419.4
42.5°	1970.4	1981.1	1966.9	1984.6	1956.1	1995.4	1981.1	1970.4
45°	1478.6	1464.4	1460.9	1464.4	1453.8	1457.2	1468.0	1460.9
47.5°	1008.4	1008.4	1001.2	990.5	1004.8	1008.4	994.1	994.1
50°	677.0	677.0	669.9	666.2	673.4	669.9	662.8	673.4
52.5°	431.1	416.9	416.9	424.0	416.9	409.8	420.5	413.4
55°	235.1	228.0	228.0	235.1	228.0	228.0	224.5	231.6
57.5°	114.0	117.6	114.0	114.0	114.0	114.0	110.5	114.0
60°	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9
62.5°	21.4	21.4	17.9	17.9	17.9	17.9	17.9	17.9
65°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
67.5°	10.8	10.8	10.8	10.8	10.8	14.2	10.8	10.8
70°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
72.5°	10.8	10.8	14.2	14.2	14.2	14.2	14.2	14.2
75°	7.1	7.1	7.1	3.6	3.6	3.6	3.6	3.6
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)