

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: P252187

Luminaire Tested: **LE_6B40D010 EC6B30509030 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252187
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 EC6B30509030 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE 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: 5677.5 lumens
Efficiency: N/A
Efficacy: 132.0 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

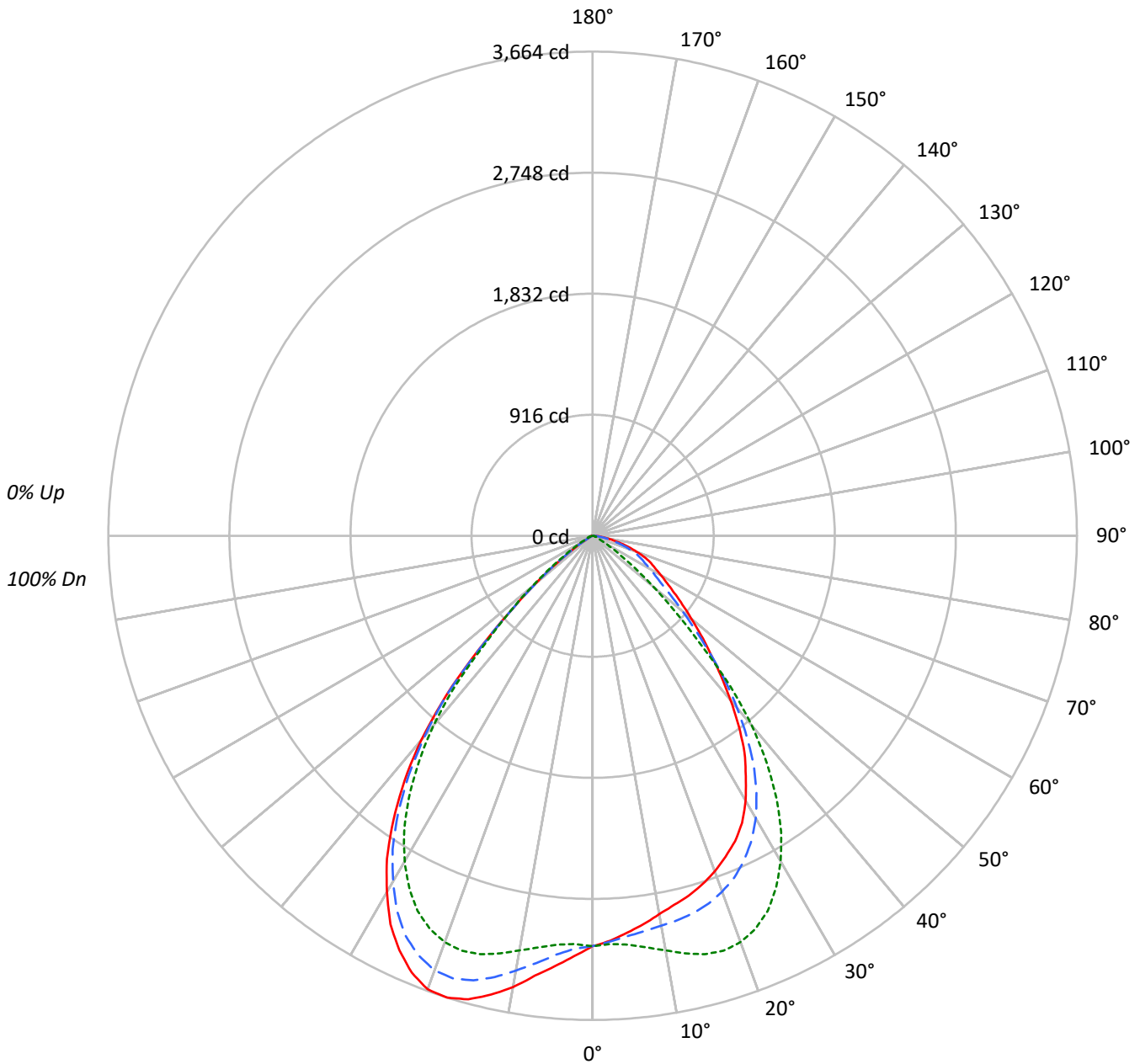
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65				65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53				53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40				40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	202637	202637	202637
5°	197386	203411	214112
10°	192587	211076	229771
15°	190334	221416	245286
20°	187607	227195	253577
25°	183620	225515	249025
30°	174480	214308	234438
35°	159639	193217	209305
40°	138087	159583	171711
45°	116437	104664	112332
50°	98857	60583	56960
55°	85785	29050	21953
60°	77493	13557	5428
65°	75179	7796	1837
70°	67411	6218	1698
75°	55405	4512	756
80°	41290	2254	0
85°	35556	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.0	5.3
10°-20°	914.3	16.1
20°-30°	1397.0	24.6
30°-40°	1461.2	25.7
40°-50°	947.9	16.7
50°-60°	376.3	6.6
60°-70°	178.5	3.1
70°-80°	84.9	1.5
80°-90°	17.3	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°	2611.4	46.0
0°-40°	4072.5	71.7
0°-60°	5396.7	95.1
0°-90°	5677.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5677.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3106	3106	3106	3106	3106	
5°	3014	3041	3106	3183	3269	285
15°	2818	2955	3278	3483	3632	794
25°	2551	2711	3133	3344	3459	1168
35°	2004	2126	2426	2569	2628	1240
45°	1262	1250	1134	1203	1218	982
55°	754	641	255	199	193	683
65°	487	404	50	12	12	476
75°	220	178	18	6	3	237
85°	48	30	0	0	0	55
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°	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0
2.5°	3067.5	3073.4	3040.8	3031.8	3055.5	3064.5	3067.5	3058.5	3061.5	3073.4	3073.4
5°	3014.0	3019.9	2990.2	2981.4	3005.1	3011.0	3019.9	3017.0	3025.9	3043.6	3040.8
7.5°	2963.5	2972.4	2939.8	2927.9	2957.6	2972.4	2978.4	2978.4	2990.2	3014.0	3017.0
10°	2907.1	2919.0	2889.2	2883.4	2916.0	2930.9	2933.9	2939.8	2957.6	2990.2	2996.1
12.5°	2859.6	2871.5	2850.6	2841.8	2877.4	2892.2	2898.1	2910.0	2930.9	2972.4	2978.4
15°	2818.0	2826.9	2803.1	2797.2	2832.9	2850.6	2853.6	2871.5	2898.1	2945.8	2954.6
17.5°	2764.5	2770.5	2752.6	2746.8	2782.4	2800.2	2803.1	2824.0	2856.6	2904.1	2919.0
20°	2702.2	2708.1	2690.4	2684.4	2720.0	2740.8	2743.8	2761.6	2800.2	2850.6	2865.5
22.5°	2628.0	2639.9	2619.0	2613.1	2648.8	2666.6	2675.5	2690.4	2728.9	2779.4	2800.2
25°	2550.8	2550.8	2535.9	2532.9	2565.6	2586.4	2583.4	2604.2	2642.8	2693.2	2711.1
27.5°	2449.8	2446.9	2432.0	2429.0	2464.6	2482.5	2476.5	2497.2	2532.9	2583.4	2601.2
30°	2316.1	2322.1	2301.4	2295.4	2325.1	2354.8	2351.8	2372.6	2408.2	2455.8	2467.6
32.5°	2155.9	2161.8	2158.8	2149.9	2176.6	2191.5	2200.4	2215.2	2244.9	2295.4	2307.2
35°	2004.4	1995.5	1983.6	1983.6	2010.4	2034.1	2025.1	2043.0	2072.6	2123.1	2126.1
37.5°	1817.2	1814.4	1808.4	1802.5	1832.1	1838.1	1841.0	1852.9	1879.6	1921.2	1915.2
40°	1621.4	1624.2	1621.4	1609.5	1627.2	1651.0	1648.0	1654.0	1677.8	1707.4	1698.5
42.5°	1437.2	1437.2	1437.2	1425.4	1446.1	1458.0	1463.9	1461.0	1466.9	1493.6	1481.8
45°	1262.0	1265.0	1262.0	1259.0	1262.0	1268.0	1262.0	1259.0	1259.0	1268.0	1250.1
47.5°	1110.6	1110.6	1101.6	1092.8	1101.6	1104.6	1095.8	1086.9	1083.9	1080.9	1051.1
50°	974.0	971.0	968.0	953.2	962.1	965.1	953.2	947.2	935.4	920.5	884.9
52.5°	855.2	852.2	849.2	834.4	840.4	843.4	831.5	819.6	804.8	792.9	748.2
55°	754.2	751.2	751.2	742.4	736.4	742.4	730.5	721.6	700.8	686.0	641.4
57.5°	668.1	668.1	662.1	653.2	656.2	656.2	644.4	632.5	614.6	596.9	561.2
60°	593.9	593.9	593.9	585.0	585.0	585.0	579.0	567.1	552.4	534.5	498.9
62.5°	534.5	534.5	531.5	522.6	525.6	525.6	519.6	507.8	492.9	481.0	445.4
65°	487.0	487.0	487.0	478.1	478.1	481.0	475.1	463.2	451.4	436.5	403.9
67.5°	427.6	424.6	424.6	418.8	421.6	424.6	418.8	409.8	394.9	386.0	356.4
70°	353.4	356.4	359.2	350.4	353.4	353.4	350.4	341.5	332.6	323.6	297.0
72.5°	288.0	288.0	285.1	282.1	282.1	285.1	279.1	270.2	264.2	258.4	237.5
75°	219.8	216.8	219.8	213.8	213.8	213.8	207.9	204.9	201.9	193.0	178.1
77.5°	160.4	157.4	157.4	151.5	154.4	154.4	151.5	145.5	139.6	136.6	124.8
80°	109.9	109.9	109.9	106.9	106.9	103.9	103.9	101.0	95.0	92.0	86.1
82.5°	74.2	74.2	74.2	71.2	71.2	71.2	68.2	65.4	62.4	59.4	53.5
85°	47.5	47.5	47.5	44.5	44.5	44.5	41.6	41.6	38.6	35.6	29.8
87.5°	26.8	26.8	26.8	23.8	23.8	23.8	23.8	23.8	20.8	17.9	14.9
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°	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0
2.5°	3094.1	3052.6	3079.4	3079.4	3070.4	3094.1	3109.0	3120.9	3117.9	3091.2	3088.2
5°	3070.4	3034.8	3064.5	3067.5	3058.5	3091.2	3112.0	3126.9	3129.8	3106.0	3109.0
7.5°	3052.6	3022.9	3061.5	3073.4	3070.4	3100.1	3123.9	3147.6	3159.5	3141.6	3144.6
10°	3043.6	3019.9	3061.5	3079.4	3082.2	3115.0	3150.6	3183.2	3198.1	3186.2	3195.1
12.5°	3031.8	3017.0	3064.5	3091.2	3103.1	3135.8	3180.2	3218.9	3242.6	3236.8	3254.5
15°	3019.9	3008.0	3064.5	3103.1	3117.9	3147.6	3198.1	3254.5	3281.2	3278.2	3302.0
17.5°	2990.2	2987.2	3046.6	3088.2	3109.0	3144.6	3192.1	3260.5	3287.1	3293.1	3322.8
20°	2942.8	2942.8	3008.0	3052.6	3076.4	3109.0	3168.4	3233.8	3266.4	3272.4	3305.0
22.5°	2877.4	2883.4	2945.8	2990.2	3025.9	3049.6	3112.0	3180.2	3210.0	3218.9	3254.5
25°	2791.2	2797.2	2856.6	2901.1	2939.8	2966.5	3025.9	3088.2	3123.9	3132.8	3159.5
27.5°	2678.5	2690.4	2746.8	2791.2	2824.0	2841.8	2904.1	2969.5	2996.1	3005.1	3031.8
30°	2547.8	2550.8	2607.1	2645.8	2678.5	2693.2	2746.8	2815.0	2835.9	2844.8	2883.4
32.5°	2387.4	2384.5	2437.9	2473.5	2500.2	2518.1	2574.5	2619.0	2639.9	2654.6	2675.5
35°	2194.4	2191.5	2230.0	2271.6	2292.4	2298.4	2354.8	2402.2	2414.1	2426.0	2452.8
37.5°	1977.6	1977.6	2010.4	2031.1	2054.9	2063.8	2090.5	2144.0	2164.8	2161.8	2182.5
40°	1749.0	1737.1	1760.9	1781.6	1787.6	1790.6	1817.2	1858.9	1873.8	1873.8	1888.6
42.5°	1508.5	1490.6	1493.6	1505.5	1511.5	1490.6	1508.5	1535.2	1526.2	1538.1	1541.1
45°	1253.1	1226.4	1214.5	1187.8	1193.8	1172.9	1161.0	1167.0	1164.0	1134.4	1140.2
47.5°	1045.2	997.8	977.0	938.4	929.4	905.6	890.9	864.1	840.4	840.4	825.5
50°	870.0	822.5	781.0	736.4	721.6	700.8	668.1	632.5	614.6	596.9	582.0
52.5°	730.5	680.0	629.5	582.0	561.2	534.5	490.0	454.4	421.6	403.9	386.0
55°	617.6	561.2	507.8	457.2	430.6	403.9	359.2	317.8	279.1	255.4	240.5
57.5°	531.5	478.1	421.6	368.2	344.5	314.8	267.2	222.8	187.1	160.4	145.5
60°	469.1	415.8	365.2	308.9	285.1	255.4	204.9	163.4	127.6	103.9	86.1
62.5°	415.8	368.2	314.8	264.2	240.5	210.9	163.4	121.8	89.1	65.4	50.5
65°	377.1	329.6	285.1	234.6	213.8	184.1	139.6	101.0	71.2	50.5	35.6
67.5°	332.6	291.0	246.5	204.9	184.1	160.4	118.8	86.1	59.4	41.6	29.8
70°	279.1	246.5	207.9	169.2	154.4	133.6	98.0	71.2	47.5	32.6	23.8
72.5°	222.8	196.0	166.2	136.6	124.8	103.9	80.1	56.4	35.6	23.8	17.9
75°	169.2	148.5	124.8	103.9	92.0	80.1	59.4	41.6	26.8	17.9	11.9
77.5°	115.8	106.9	89.1	71.2	65.4	56.4	38.6	26.8	17.9	11.9	6.0
80°	80.1	71.2	59.4	47.5	41.6	35.6	23.8	17.9	8.9	6.0	3.0
82.5°	50.5	41.6	35.6	29.8	26.8	20.8	14.9	8.9	6.0	3.0	3.0
85°	26.8	23.8	20.8	14.9	14.9	11.9	8.9	6.0	3.0	0.0	0.0
87.5°	14.9	11.9	8.9	6.0	6.0	3.0	3.0	3.0	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°	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0
2.5°	3123.9	3123.9	3120.9	3156.5	3115.0	3156.5	3135.8	3156.5	3126.9	3123.9	3126.9
5°	3147.6	3156.5	3159.5	3192.1	3153.5	3204.0	3186.2	3204.0	3183.2	3189.1	3198.1
7.5°	3195.1	3210.0	3207.0	3248.6	3210.0	3266.4	3254.5	3281.2	3260.5	3266.4	3278.2
10°	3248.6	3266.4	3269.4	3310.9	3275.2	3343.6	3328.8	3358.5	3340.6	3349.5	3364.4
12.5°	3310.9	3331.8	3334.8	3382.2	3343.6	3414.9	3406.0	3435.6	3420.8	3429.8	3447.5
15°	3358.5	3388.1	3394.1	3441.6	3400.0	3474.2	3468.4	3506.9	3483.1	3498.0	3512.9
17.5°	3382.2	3408.9	3420.8	3465.4	3429.8	3504.0	3498.0	3530.6	3512.9	3527.8	3545.5
20°	3367.4	3400.0	3408.9	3453.5	3417.9	3492.1	3483.1	3515.9	3498.0	3509.9	3527.8
22.5°	3313.9	3346.6	3358.5	3400.0	3367.4	3435.6	3432.6	3462.4	3438.6	3453.5	3468.4
25°	3218.9	3254.5	3260.5	3299.0	3263.4	3334.8	3328.8	3361.4	3343.6	3352.5	3373.2
27.5°	3082.2	3123.9	3132.8	3165.4	3138.8	3198.1	3198.1	3224.9	3204.0	3204.0	3224.9
30°	2919.0	2960.5	2966.5	2993.2	2969.5	3022.9	3025.9	3052.6	3019.9	3037.8	3040.8
32.5°	2720.0	2746.8	2764.5	2788.2	2752.6	2821.0	2812.1	2832.9	2815.0	2815.0	2829.9
35°	2479.5	2512.1	2521.0	2550.8	2521.0	2574.5	2574.5	2586.4	2568.6	2568.6	2592.4
37.5°	2218.1	2241.9	2244.9	2274.6	2250.9	2295.4	2292.4	2301.4	2283.5	2295.4	2295.4
40°	1912.4	1930.1	1936.1	1950.9	1948.0	1980.6	1977.6	1983.6	1974.6	1977.6	1983.6
42.5°	1556.0	1579.8	1591.6	1603.5	1585.6	1630.2	1621.4	1630.2	1627.2	1630.2	1639.1
45°	1146.2	1164.0	1172.9	1175.9	1170.0	1196.6	1217.5	1199.6	1202.6	1196.6	1208.6
47.5°	828.5	831.5	825.5	843.4	828.5	840.4	846.2	849.2	831.5	828.5	840.4
50°	567.1	582.0	561.2	570.1	567.1	579.0	573.1	576.1	558.2	567.1	561.2
52.5°	377.1	374.1	368.2	371.1	365.2	365.2	365.2	371.1	359.2	353.4	347.4
55°	228.6	222.8	210.9	207.9	207.9	210.9	204.9	199.0	199.0	196.0	196.0
57.5°	133.6	124.8	118.8	115.8	109.9	106.9	103.9	103.9	98.0	98.0	98.0
60°	74.2	65.4	59.4	53.5	53.5	50.5	47.5	44.5	44.5	44.5	41.6
62.5°	38.6	32.6	26.8	23.8	23.8	20.8	17.9	17.9	17.9	17.9	14.9
65°	26.8	20.8	17.9	14.9	14.9	11.9	11.9	11.9	11.9	11.9	11.9
67.5°	20.8	17.9	14.9	11.9	11.9	11.9	8.9	8.9	8.9	8.9	8.9
70°	17.9	11.9	11.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
72.5°	11.9	11.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
75°	8.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
77.5°	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0
80°	3.0	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: P252187

CATALOG NUMBER: LE_6B40D010 EC6B30509030 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0	3106.0
2.5°	3153.5	3150.6	3153.5	3159.5	3147.6	3183.2	3165.4	3183.2
5°	3221.9	3224.9	3227.8	3236.8	3221.9	3266.4	3242.6	3269.4
7.5°	3310.9	3313.9	3316.9	3325.8	3316.9	3361.4	3334.8	3358.5
10°	3403.0	3408.9	3408.9	3423.8	3414.9	3456.4	3438.6	3468.4
12.5°	3489.1	3495.0	3501.0	3509.9	3504.0	3548.5	3533.6	3557.4
15°	3557.4	3569.2	3572.2	3584.1	3578.1	3625.8	3607.9	3631.6
17.5°	3590.0	3602.0	3602.0	3616.8	3610.9	3661.4	3637.6	3664.2
20°	3572.2	3581.1	3584.1	3599.0	3593.0	3643.5	3619.8	3652.4
22.5°	3515.9	3518.8	3521.8	3536.6	3533.6	3578.1	3557.4	3578.1
25°	3411.9	3420.8	3417.9	3429.8	3429.8	3465.4	3441.6	3459.4
27.5°	3263.4	3272.4	3272.4	3287.1	3275.2	3310.9	3287.1	3313.9
30°	3082.2	3091.2	3085.2	3097.1	3085.2	3120.9	3103.1	3112.0
32.5°	2865.5	2865.5	2868.5	2871.5	2865.5	2898.1	2880.4	2898.1
35°	2607.1	2613.1	2616.1	2619.0	2613.1	2636.9	2616.1	2628.0
37.5°	2316.1	2331.0	2328.0	2331.0	2322.1	2351.8	2334.0	2339.9
40°	2004.4	2004.4	2001.4	2007.4	1998.4	2022.2	2010.4	2016.2
42.5°	1642.1	1651.0	1639.1	1654.0	1630.2	1662.9	1651.0	1642.1
45°	1232.4	1220.5	1217.5	1220.5	1211.5	1214.5	1223.4	1217.5
47.5°	840.4	840.4	834.4	825.5	837.4	840.4	828.5	828.5
50°	564.2	564.2	558.2	555.2	561.2	558.2	552.4	561.2
52.5°	359.2	347.4	347.4	353.4	347.4	341.5	350.4	344.5
55°	196.0	190.0	190.0	196.0	190.0	190.0	187.1	193.0
57.5°	95.0	98.0	95.0	95.0	95.0	95.0	92.0	95.0
60°	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6
62.5°	17.9	17.9	14.9	14.9	14.9	14.9	14.9	14.9
65°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
67.5°	8.9	8.9	8.9	8.9	8.9	11.9	8.9	8.9
70°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
72.5°	8.9	8.9	11.9	11.9	11.9	11.9	11.9	11.9
75°	6.0	6.0	6.0	3.0	3.0	3.0	3.0	3.0
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)