

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: P252181

Luminaire Tested: **LE_6B40D010 EC6B30508030 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252181
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 EC6B30508030 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6647.5 lumens
Efficiency: N/A
Efficacy: 154.6 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

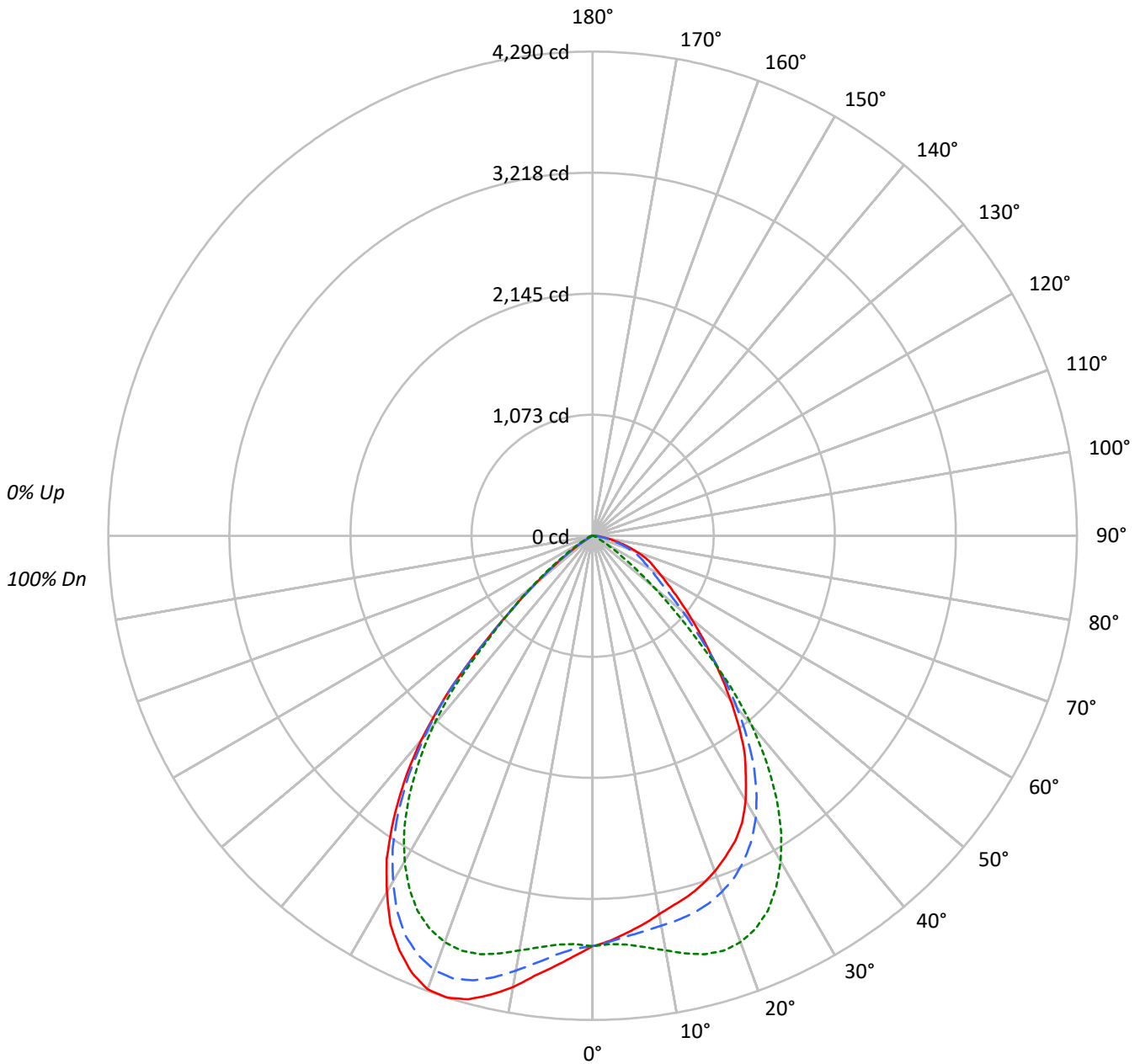
Input Watts (W): 43
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	237267	237267	237267
5°	231107	238173	250689
10°	225492	247141	269023
15°	222855	259253	287196
20°	219662	266005	296900
25°	214983	264041	291576
30°	204297	250920	274485
35°	186917	226229	245065
40°	161678	186845	201059
45°	136330	122536	131523
50°	115746	70936	66693
55°	100447	34009	25706
60°	90737	15867	6341
65°	88023	9123	2146
70°	78933	7287	1984
75°	64833	5268	882
80°	48316	2630	0
85°	41620	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.3	5.3
10°-20°	1070.6	16.1
20°-30°	1635.7	24.6
30°-40°	1710.8	25.7
40°-50°	1109.8	16.7
50°-60°	440.7	6.6
60°-70°	209.0	3.1
70°-80°	99.4	1.5
80°-90°	20.3	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°	3057.5	46.0
0°-40°	4768.3	71.7
0°-60°	6318.8	95.1
0°-90°	6647.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6647.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3637	3637	3637	3637	3637	
5°	3529	3560	3637	3727	3828	333
15°	3300	3459	3838	4078	4252	930
25°	2986	3174	3668	3915	4050	1368
35°	2347	2489	2840	3007	3077	1451
45°	1478	1464	1328	1408	1426	1150
55°	883	751	299	233	226	800
65°	570	473	59	14	14	557
75°	257	209	21	7	4	277
85°	56	35	0	0	0	65
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°	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8
2.5°	3591.5	3598.5	3560.2	3549.8	3577.6	3588.0	3591.5	3581.1	3584.5	3598.5	3598.5
5°	3528.9	3535.9	3501.1	3490.6	3518.5	3525.5	3535.9	3532.4	3542.9	3563.8	3560.2
7.5°	3469.9	3480.2	3442.0	3428.1	3462.9	3480.2	3487.2	3487.2	3501.1	3528.9	3532.4
10°	3403.8	3417.6	3382.9	3376.0	3414.2	3431.6	3435.0	3442.0	3462.9	3501.1	3508.1
12.5°	3348.1	3362.0	3337.8	3327.2	3369.0	3386.4	3393.4	3407.2	3431.6	3480.2	3487.2
15°	3299.5	3309.9	3282.1	3275.1	3316.9	3337.8	3341.1	3362.0	3393.4	3449.0	3459.4
17.5°	3236.9	3243.9	3223.0	3216.0	3257.8	3278.6	3282.1	3306.4	3344.6	3400.2	3417.6
20°	3163.9	3170.9	3150.0	3143.0	3184.8	3209.1	3212.5	3233.4	3278.6	3337.8	3355.1
22.5°	3077.0	3090.9	3066.5	3059.5	3101.2	3122.1	3132.6	3150.0	3195.1	3254.2	3278.6
25°	2986.5	2986.5	2969.1	2965.8	3003.9	3028.2	3024.8	3049.1	3094.4	3153.4	3174.2
27.5°	2868.4	2864.9	2847.5	2844.0	2885.8	2906.6	2899.6	2924.0	2965.8	3024.8	3045.6
30°	2711.9	2718.9	2694.5	2687.5	2722.4	2757.1	2753.6	2778.0	2819.6	2875.2	2889.2
32.5°	2524.1	2531.1	2527.6	2517.1	2548.5	2565.9	2576.2	2593.6	2628.5	2687.5	2701.5
35°	2346.9	2336.4	2322.5	2322.5	2353.8	2381.6	2371.1	2392.0	2426.8	2485.9	2489.4
37.5°	2127.8	2124.2	2117.4	2110.4	2145.1	2152.1	2155.6	2169.5	2200.8	2249.5	2242.5
40°	1898.4	1901.8	1898.4	1884.4	1905.2	1933.1	1929.6	1936.6	1964.4	1999.1	1988.8
42.5°	1682.8	1682.8	1682.8	1668.9	1693.2	1707.1	1714.0	1710.6	1717.5	1748.9	1734.9
45°	1477.6	1481.1	1477.6	1474.1	1477.6	1484.6	1477.6	1474.1	1474.1	1484.6	1463.8
47.5°	1300.4	1300.4	1289.9	1279.5	1289.9	1293.4	1282.9	1272.5	1269.0	1265.5	1230.8
50°	1140.4	1136.9	1133.4	1116.0	1126.5	1130.0	1116.0	1109.1	1095.1	1077.8	1036.1
52.5°	1001.2	997.9	994.4	977.0	983.9	987.4	973.5	959.6	942.2	928.2	876.1
55°	883.1	879.6	879.6	869.2	862.2	869.2	855.2	844.9	820.5	803.1	751.0
57.5°	782.2	782.2	775.4	764.9	768.4	768.4	754.5	740.5	719.8	698.9	657.1
60°	695.4	695.4	695.4	684.9	684.9	684.9	678.0	664.1	646.6	625.9	584.1
62.5°	625.9	625.9	622.4	611.9	615.4	615.4	608.4	594.5	577.1	563.2	521.5
65°	570.2	570.2	570.2	559.8	559.8	563.2	556.2	542.4	528.5	511.1	472.9
67.5°	500.6	497.1	497.1	490.2	493.8	497.1	490.2	479.8	462.4	452.0	417.2
70°	413.8	417.2	420.8	410.2	413.8	413.8	410.2	399.9	389.4	379.0	347.6
72.5°	337.2	337.2	333.8	330.2	330.2	333.8	326.9	316.4	309.4	302.5	278.1
75°	257.2	253.8	257.2	250.4	250.4	250.4	243.4	239.9	236.4	226.0	208.6
77.5°	187.8	184.2	184.2	177.4	180.8	180.8	177.4	170.4	163.4	159.9	146.0
80°	128.6	128.6	128.6	125.1	125.1	121.6	121.6	118.2	111.2	107.8	100.9
82.5°	86.9	86.9	86.9	83.5	83.5	83.5	80.0	76.5	73.0	69.5	62.6
85°	55.6	55.6	55.6	52.1	52.1	52.1	48.6	48.6	45.2	41.8	34.8
87.5°	31.2	31.2	31.2	27.9	27.9	27.9	27.9	27.9	24.4	20.9	17.4
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°	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8
2.5°	3622.8	3574.1	3605.4	3605.4	3595.0	3622.8	3640.1	3654.1	3650.6	3619.4	3615.9
5°	3595.0	3553.2	3588.0	3591.5	3581.1	3619.4	3643.6	3661.0	3664.5	3636.8	3640.1
7.5°	3574.1	3539.4	3584.5	3598.5	3595.0	3629.8	3657.6	3685.4	3699.2	3678.4	3681.9
10°	3563.8	3535.9	3584.5	3605.4	3608.9	3647.1	3688.9	3727.1	3744.5	3730.6	3741.0
12.5°	3549.8	3532.4	3588.0	3619.4	3633.2	3671.5	3723.6	3768.9	3796.6	3789.6	3810.5
15°	3535.9	3522.0	3588.0	3633.2	3650.6	3685.4	3744.5	3810.5	3841.9	3838.4	3866.1
17.5°	3501.1	3497.6	3567.1	3615.9	3640.1	3681.9	3737.5	3817.5	3848.8	3855.8	3890.5
20°	3445.5	3445.5	3522.0	3574.1	3602.0	3640.1	3709.8	3786.2	3824.5	3831.4	3869.6
22.5°	3369.0	3376.0	3449.0	3501.1	3542.9	3570.6	3643.6	3723.6	3758.4	3768.9	3810.5
25°	3268.1	3275.1	3344.6	3396.8	3442.0	3473.2	3542.9	3615.9	3657.6	3668.0	3699.2
27.5°	3136.0	3150.0	3216.0	3268.1	3306.4	3327.2	3400.2	3476.8	3508.1	3518.5	3549.8
30°	2983.1	2986.5	3052.6	3097.8	3136.0	3153.4	3216.0	3296.0	3320.4	3330.8	3376.0
32.5°	2795.4	2791.9	2854.4	2896.1	2927.5	2948.2	3014.4	3066.5	3090.9	3108.2	3132.6
35°	2569.4	2565.9	2611.0	2659.8	2684.1	2691.0	2757.1	2812.8	2826.6	2840.5	2871.9
37.5°	2315.5	2315.5	2353.8	2378.1	2405.9	2416.4	2447.6	2510.2	2534.6	2531.1	2555.4
40°	2047.9	2033.9	2061.8	2086.1	2093.0	2096.5	2127.8	2176.5	2193.9	2193.9	2211.2
42.5°	1766.2	1745.4	1748.9	1762.8	1769.6	1745.4	1766.2	1797.5	1787.1	1801.0	1804.5
45°	1467.2	1435.9	1422.0	1390.8	1397.6	1373.4	1359.4	1366.4	1362.9	1328.1	1335.1
47.5°	1223.9	1168.2	1143.9	1098.6	1088.2	1060.4	1043.0	1011.8	983.9	983.9	966.5
50°	1018.8	963.1	914.4	862.2	844.9	820.5	782.2	740.5	719.8	698.9	681.5
52.5°	855.2	796.1	737.1	681.5	657.1	625.9	573.6	532.0	493.8	472.9	452.0
55°	723.1	657.1	594.5	535.4	504.1	472.9	420.8	372.0	326.9	299.0	281.6
57.5°	622.4	559.8	493.8	431.1	403.2	368.5	312.9	260.8	219.0	187.8	170.4
60°	549.4	486.8	427.6	361.6	333.8	299.0	239.9	191.2	149.5	121.6	100.9
62.5°	486.8	431.1	368.5	309.4	281.6	246.9	191.2	142.5	104.2	76.5	59.1
65°	441.5	385.9	333.8	274.6	250.4	215.5	163.4	118.2	83.5	59.1	41.8
67.5°	389.4	340.8	288.6	239.9	215.5	187.8	139.1	100.9	69.5	48.6	34.8
70°	326.9	288.6	243.4	198.1	180.8	156.5	114.8	83.5	55.6	38.2	27.9
72.5°	260.8	229.5	194.8	159.9	146.0	121.6	93.9	66.0	41.8	27.9	20.9
75°	198.1	173.9	146.0	121.6	107.8	93.9	69.5	48.6	31.2	20.9	13.9
77.5°	135.6	125.1	104.2	83.5	76.5	66.0	45.2	31.2	20.9	13.9	7.0
80°	93.9	83.5	69.5	55.6	48.6	41.8	27.9	20.9	10.4	7.0	3.5
82.5°	59.1	48.6	41.8	34.8	31.2	24.4	17.4	10.4	7.0	3.5	3.5
85°	31.2	27.9	24.4	17.4	17.4	13.9	10.4	7.0	3.5	0.0	0.0
87.5°	17.4	13.9	10.4	7.0	7.0	3.5	3.5	3.5	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°	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8
2.5°	3657.6	3657.6	3654.1	3695.8	3647.1	3695.8	3671.5	3695.8	3661.0	3657.6	3661.0
5°	3685.4	3695.8	3699.2	3737.5	3692.4	3751.5	3730.6	3751.5	3727.1	3734.0	3744.5
7.5°	3741.0	3758.4	3754.9	3803.6	3758.4	3824.5	3810.5	3841.9	3817.5	3824.5	3838.4
10°	3803.6	3824.5	3827.9	3876.6	3834.9	3914.9	3897.5	3932.2	3911.4	3921.8	3939.1
12.5°	3876.6	3901.0	3904.4	3960.0	3914.9	3998.2	3987.9	4022.6	4005.2	4015.6	4036.5
15°	3932.2	3967.0	3974.0	4029.6	3980.9	4067.9	4060.9	4106.1	4078.2	4095.6	4113.0
17.5°	3960.0	3991.4	4005.2	4057.4	4015.6	4102.6	4095.6	4133.9	4113.0	4130.4	4151.2
20°	3942.6	3980.9	3991.4	4043.5	4001.8	4088.8	4078.2	4116.5	4095.6	4109.5	4130.4
22.5°	3880.1	3918.4	3932.2	3980.9	3942.6	4022.6	4019.1	4053.9	4026.1	4043.5	4060.9
25°	3768.9	3810.5	3817.5	3862.8	3821.0	3904.4	3897.5	3935.8	3914.9	3925.2	3949.6
27.5°	3608.9	3657.6	3668.0	3706.2	3675.0	3744.5	3744.5	3775.8	3751.5	3751.5	3775.8
30°	3417.6	3466.4	3473.2	3504.6	3476.8	3539.4	3542.9	3574.1	3535.9	3556.8	3560.2
32.5°	3184.8	3216.0	3236.9	3264.8	3223.0	3302.9	3292.5	3316.9	3296.0	3296.0	3313.4
35°	2903.1	2941.4	2951.8	2986.5	2951.8	3014.4	3014.4	3028.2	3007.4	3007.4	3035.2
37.5°	2597.1	2625.0	2628.5	2663.2	2635.4	2687.5	2684.1	2694.5	2673.6	2687.5	2687.5
40°	2239.0	2259.9	2266.9	2284.2	2280.8	2319.0	2315.5	2322.5	2312.0	2315.5	2322.5
42.5°	1821.9	1849.6	1863.5	1877.5	1856.6	1908.8	1898.4	1908.8	1905.2	1908.8	1919.1
45°	1342.0	1362.9	1373.4	1376.8	1369.9	1401.1	1425.5	1404.6	1408.1	1401.1	1415.0
47.5°	970.0	973.5	966.5	987.4	970.0	983.9	990.9	994.4	973.5	970.0	983.9
50°	664.1	681.5	657.1	667.5	664.1	678.0	671.0	674.5	653.6	664.1	657.1
52.5°	441.5	438.1	431.1	434.6	427.6	427.6	427.6	434.6	420.8	413.8	406.8
55°	267.8	260.8	246.9	243.4	243.4	246.9	239.9	233.0	233.0	229.5	229.5
57.5°	156.5	146.0	139.1	135.6	128.6	125.1	121.6	121.6	114.8	114.8	114.8
60°	86.9	76.5	69.5	62.6	62.6	59.1	55.6	52.1	52.1	52.1	48.6
62.5°	45.2	38.2	31.2	27.9	27.9	24.4	20.9	20.9	20.9	20.9	17.4
65°	31.2	24.4	20.9	17.4	17.4	13.9	13.9	13.9	13.9	13.9	13.9
67.5°	24.4	20.9	17.4	13.9	13.9	13.9	10.4	10.4	10.4	10.4	10.4
70°	20.9	13.9	13.9	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
72.5°	13.9	13.9	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
75°	10.4	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
77.5°	3.5	3.5	3.5	3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0
80°	3.5	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: P252181

CATALOG NUMBER: LE_6B40D010 EC6B30508030 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8	3636.8
2.5°	3692.4	3688.9	3692.4	3699.2	3685.4	3727.1	3706.2	3727.1
5°	3772.2	3775.8	3779.2	3789.6	3772.2	3824.5	3796.6	3827.9
7.5°	3876.6	3880.1	3883.5	3894.0	3883.5	3935.8	3904.4	3932.2
10°	3984.4	3991.4	3991.4	4008.8	3998.2	4047.0	4026.1	4060.9
12.5°	4085.2	4092.1	4099.1	4109.5	4102.6	4154.8	4137.4	4165.1
15°	4165.1	4179.1	4182.5	4196.5	4189.5	4245.1	4224.2	4252.1
17.5°	4203.4	4217.4	4217.4	4234.8	4227.8	4286.9	4259.0	4290.4
20°	4182.5	4193.0	4196.5	4213.9	4206.9	4266.0	4238.2	4276.4
22.5°	4116.5	4120.0	4123.5	4140.9	4137.4	4189.5	4165.1	4189.5
25°	3994.9	4005.2	4001.8	4015.6	4015.6	4057.4	4029.6	4050.5
27.5°	3821.0	3831.4	3831.4	3848.8	3834.9	3876.6	3848.8	3880.1
30°	3608.9	3619.4	3612.4	3626.2	3612.4	3654.1	3633.2	3643.6
32.5°	3355.1	3355.1	3358.6	3362.0	3355.1	3393.4	3372.5	3393.4
35°	3052.6	3059.5	3063.0	3066.5	3059.5	3087.4	3063.0	3077.0
37.5°	2711.9	2729.2	2725.8	2729.2	2718.9	2753.6	2732.8	2739.8
40°	2346.9	2346.9	2343.4	2350.2	2339.9	2367.6	2353.8	2360.8
42.5°	1922.6	1933.1	1919.1	1936.6	1908.8	1947.0	1933.1	1922.6
45°	1442.9	1429.0	1425.5	1429.0	1418.5	1422.0	1432.4	1425.5
47.5°	983.9	983.9	977.0	966.5	980.5	983.9	970.0	970.0
50°	660.6	660.6	653.6	650.1	657.1	653.6	646.6	657.1
52.5°	420.8	406.8	406.8	413.8	406.8	399.9	410.2	403.2
55°	229.5	222.5	222.5	229.5	222.5	222.5	219.0	226.0
57.5°	111.2	114.8	111.2	111.2	111.2	111.2	107.8	111.2
60°	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
62.5°	20.9	20.9	17.4	17.4	17.4	17.4	17.4	17.4
65°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
67.5°	10.4	10.4	10.4	10.4	10.4	13.9	10.4	10.4
70°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
72.5°	10.4	10.4	13.9	13.9	13.9	13.9	13.9	13.9
75°	7.0	7.0	7.0	3.5	3.5	3.5	3.5	3.5
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)