

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: P252611

Luminaire Tested: **LE\_6B50D010R EC6B30508035 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252611  
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 EC6B30508035 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE 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: 6830.0 lumens  
Efficiency: N/A  
Efficacy: 116.2 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

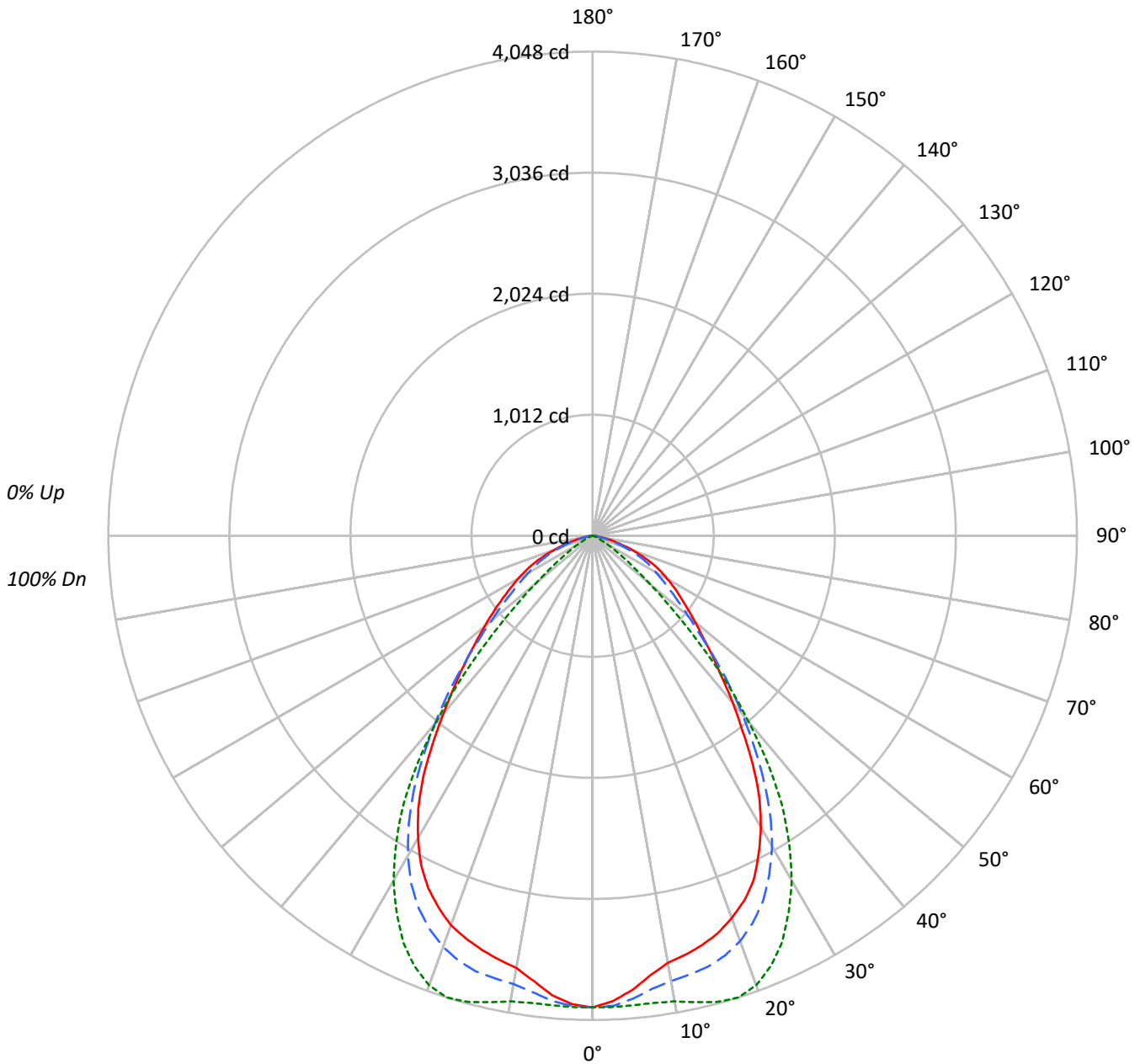
Input Watts (W): 58.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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°	257257	257257	257257
5°	249588	257951	252568
10°	240093	261835	243113
15°	239241	272498	242010
20°	236109	277572	240539
25°	229056	269742	233980
30°	211898	250702	219793
35°	185897	220383	196793
40°	154908	172767	165008
45°	130388	113983	139227
50°	112905	62461	119847
55°	102153	33190	104746
60°	93973	17250	93973
65°	85152	9139	83037
70°	68689	5227	63482
75°	47112	3428	43659
80°	30808	1691	27427
85°	20510	3368	17067



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	367.7	5.4
10°-20°	1063.3	15.6
20°-30°	1571.0	23.0
30°-40°	1586.8	23.2
40°-50°	1093.7	16.0
50°-60°	628.2	9.2
60°-70°	365.6	5.4
70°-80°	133.4	2.0
80°-90°	20.4	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°	3002.0	44.0
0°-40°	4588.8	67.2
0°-60°	6310.6	92.4
0°-90°	6830.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6830.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3943	3943	3943	3943	3943	
5°	3811	3884	3939	3902	3857	358
15°	3542	3729	4034	3770	3583	998
25°	3182	3369	3747	3437	3250	1450
35°	2334	2494	2767	2608	2471	1449
45°	1413	1432	1235	1523	1509	1099
55°	898	789	292	821	921	809
65°	552	465	59	460	538	540
75°	187	150	14	146	173	210
85°	27	14	4	18	23	35
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°	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2
2.5°	3893.1	3897.8	3902.2	3897.8	3902.2	3920.5	3906.9	3916.0	3916.0	3920.5	3934.1
5°	3811.1	3811.1	3820.2	3815.6	3829.4	3847.6	3833.9	3847.6	3852.1	3861.2	3884.0
7.5°	3706.2	3706.2	3710.8	3710.8	3729.0	3747.2	3738.1	3756.4	3774.6	3792.9	3820.2
10°	3624.2	3633.2	3633.2	3637.9	3656.1	3678.9	3674.4	3697.1	3715.4	3742.8	3779.1
12.5°	3587.8	3592.2	3592.2	3601.4	3619.6	3642.4	3637.9	3660.6	3688.0	3719.9	3756.4
15°	3542.1	3551.2	3546.8	3555.8	3574.0	3596.9	3592.2	3615.1	3647.0	3678.9	3729.0
17.5°	3482.9	3487.4	3492.0	3492.0	3510.2	3528.5	3528.5	3551.2	3587.8	3624.2	3678.9
20°	3400.8	3409.9	3409.9	3414.5	3428.1	3455.5	3451.0	3473.8	3510.2	3546.8	3606.0
22.5°	3305.1	3309.6	3309.6	3314.2	3337.0	3350.6	3355.2	3373.5	3405.4	3446.4	3501.1
25°	3182.0	3186.5	3182.0	3195.6	3204.8	3232.1	3223.0	3245.9	3282.2	3314.2	3368.9
27.5°	3004.2	3013.4	3013.4	3017.9	3040.6	3063.5	3063.5	3086.2	3118.1	3141.0	3195.6
30°	2812.8	2826.4	2812.8	2835.5	2844.6	2862.9	2876.5	2890.2	2917.6	2949.5	2999.6
32.5°	2593.9	2589.4	2593.9	2603.0	2630.4	2644.0	2653.1	2666.9	2694.2	2721.5	2762.6
35°	2334.1	2343.1	2347.8	2366.0	2366.0	2388.8	2393.4	2402.5	2443.5	2461.8	2493.6
37.5°	2060.5	2069.6	2074.2	2083.4	2101.6	2110.8	2124.4	2138.0	2165.4	2197.2	2215.5
40°	1818.9	1818.9	1823.5	1832.6	1846.2	1850.9	1864.5	1882.8	1901.0	1928.4	1946.6
42.5°	1591.0	1595.5	1591.0	1600.1	1613.8	1632.0	1627.5	1650.2	1654.9	1673.0	1686.8
45°	1413.2	1413.2	1404.1	1413.2	1413.2	1431.5	1426.9	1436.0	1431.5	1440.5	1431.5
47.5°	1244.5	1249.1	1244.5	1249.1	1249.1	1249.1	1253.6	1244.5	1249.1	1235.4	1208.1
50°	1112.4	1116.9	1107.8	1112.4	1107.8	1103.2	1107.8	1094.1	1089.5	1071.2	1044.0
52.5°	998.4	993.8	989.2	989.2	989.2	984.6	980.1	966.5	952.8	934.5	902.6
55°	898.1	893.5	889.0	889.0	879.9	875.2	875.2	861.6	847.9	825.1	788.6
57.5°	806.9	802.4	797.8	797.8	793.2	784.1	784.1	770.4	752.2	724.9	692.9
60°	720.2	720.2	720.2	715.8	715.8	706.6	706.6	692.9	674.8	647.4	610.9
62.5°	642.8	638.2	638.2	638.2	638.2	633.6	629.1	620.0	601.8	574.4	542.5
65°	551.6	551.6	551.6	551.6	547.0	547.0	547.0	533.4	524.2	496.9	465.0
67.5°	451.4	451.4	451.4	451.4	446.8	451.4	451.4	442.2	433.1	405.8	378.4
70°	360.1	355.6	351.0	355.6	351.0	351.0	355.6	346.5	341.9	319.1	291.8
72.5°	264.4	269.0	264.4	264.4	264.4	259.9	264.4	259.9	250.8	232.5	214.2
75°	186.9	191.5	191.5	186.9	186.9	186.9	182.4	182.4	173.2	159.5	150.5
77.5°	127.6	127.6	127.6	127.6	123.1	123.1	123.1	118.5	114.0	104.9	95.8
80°	82.0	82.0	82.0	82.0	77.5	77.5	77.5	73.0	73.0	63.9	54.8
82.5°	50.1	50.1	50.1	50.1	50.1	50.1	45.6	45.6	41.0	36.5	31.9
85°	27.4	27.4	27.4	27.4	27.4	27.4	27.4	22.8	22.8	18.2	13.6
87.5°	9.1	9.1	13.6	13.6	13.6	13.6	13.6	13.6	9.1	9.1	9.1
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°	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2
2.5°	3925.1	3929.6	3929.6	3929.6	3943.2	3947.9	3934.1	3920.5	3947.9	3943.2	3952.4
5°	3879.5	3893.1	3902.2	3906.9	3920.5	3929.6	3916.0	3911.4	3934.1	3938.8	3943.2
7.5°	3824.8	3847.6	3870.4	3879.5	3897.8	3906.9	3902.2	3902.2	3929.6	3938.8	3938.8
10°	3788.2	3820.2	3847.6	3870.4	3893.1	3906.9	3906.9	3911.4	3943.2	3952.4	3961.5
12.5°	3779.1	3820.2	3856.6	3888.6	3906.9	3929.6	3934.1	3947.9	3979.8	3993.5	3993.5
15°	3756.4	3811.1	3856.6	3897.8	3925.1	3952.4	3961.5	3988.9	4025.4	4034.5	4043.6
17.5°	3715.4	3770.1	3824.8	3874.9	3911.4	3934.1	3961.5	3988.9	4034.5	4048.1	4052.8
20°	3642.4	3706.2	3761.0	3811.1	3847.6	3879.5	3906.9	3938.8	3979.8	3998.0	4002.6
22.5°	3533.0	3596.9	3651.5	3706.2	3742.8	3770.1	3797.4	3833.9	3874.9	3893.1	3893.1
25°	3400.8	3460.1	3519.4	3560.4	3596.9	3628.8	3642.4	3683.5	3724.5	3747.2	3747.2
27.5°	3232.1	3286.9	3341.5	3387.1	3409.9	3437.2	3460.1	3496.5	3528.5	3546.8	3564.9
30°	3017.9	3072.6	3122.8	3168.4	3195.6	3223.0	3245.9	3273.1	3305.1	3327.9	3332.4
32.5°	2785.4	2831.0	2881.1	2926.8	2954.0	2963.1	2986.0	3013.4	3040.6	3058.9	3063.5
35°	2530.1	2562.0	2593.9	2635.0	2662.2	2662.2	2685.1	2703.4	2726.1	2767.1	2758.0
37.5°	2229.2	2274.8	2297.6	2311.2	2329.5	2347.8	2352.2	2375.1	2402.5	2411.6	2425.2
40°	1946.6	1960.2	1973.9	1973.9	1992.1	1992.1	1992.1	1996.8	2024.1	2028.6	2046.9
42.5°	1663.9	1663.9	1650.2	1636.6	1641.1	1636.6	1613.8	1613.8	1627.5	1645.8	1645.8
45°	1399.5	1367.6	1326.6	1294.6	1271.9	1262.8	1235.4	1235.4	1230.9	1235.4	1253.6
47.5°	1176.1	1121.5	1053.1	989.2	966.5	948.2	907.1	889.0	879.9	884.4	893.5
50°	989.2	930.0	852.5	775.0	734.0	711.1	661.0	629.1	624.5	615.4	633.6
52.5°	852.5	779.5	697.5	606.2	565.2	528.8	474.1	446.8	428.5	428.5	433.1
55°	734.0	656.5	565.2	474.1	433.1	405.8	351.0	314.5	296.4	291.8	305.4
57.5°	633.6	560.8	469.5	378.4	337.4	305.4	250.8	218.9	205.1	196.0	200.6
60°	556.1	483.2	392.0	305.4	269.0	232.5	186.9	150.5	132.2	132.2	136.8
62.5°	483.2	414.9	332.8	250.8	218.9	186.9	136.8	104.9	91.1	86.6	91.1
65°	410.2	346.5	278.1	209.8	177.8	150.5	109.4	82.0	63.9	59.2	63.9
67.5°	332.8	282.6	223.4	168.6	141.4	118.5	82.0	59.2	45.6	41.0	45.6
70°	259.9	214.2	168.6	123.1	104.9	86.6	59.2	45.6	31.9	27.4	31.9
72.5°	186.9	155.0	118.5	86.6	73.0	59.2	41.0	31.9	22.8	18.2	22.8
75°	127.6	104.9	77.5	54.8	45.6	41.0	27.4	18.2	13.6	13.6	13.6
77.5°	82.0	63.9	50.1	36.5	27.4	22.8	13.6	9.1	9.1	9.1	9.1
80°	45.6	36.5	27.4	18.2	13.6	13.6	9.1	9.1	4.5	4.5	4.5
82.5°	27.4	18.2	13.6	9.1	9.1	4.5	4.5	4.5	4.5	4.5	4.5
85°	13.6	9.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
87.5°	4.5	4.5	4.5	4.5	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°	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2
2.5°	3934.1	3938.8	3925.1	3943.2	3929.6	3947.9	3947.9	3929.6	3934.1	3925.1	3943.2
5°	3925.1	3925.1	3916.0	3929.6	3911.4	3929.6	3925.1	3893.1	3902.2	3884.0	3902.2
7.5°	3925.1	3916.0	3902.2	3916.0	3893.1	3906.9	3888.6	3856.6	3847.6	3824.8	3824.8
10°	3938.8	3925.1	3906.9	3911.4	3888.6	3893.1	3865.8	3820.2	3806.5	3779.1	3770.1
12.5°	3970.6	3957.0	3929.6	3938.8	3906.9	3906.9	3870.4	3815.6	3788.2	3751.9	3742.8
15°	4016.2	3993.5	3961.5	3966.1	3934.1	3916.0	3870.4	3806.5	3770.1	3719.9	3706.2
17.5°	4025.4	4002.6	3961.5	3961.5	3920.5	3897.8	3843.0	3770.1	3724.5	3674.4	3647.0
20°	3975.2	3952.4	3906.9	3902.2	3865.8	3833.9	3774.6	3701.6	3656.1	3601.4	3578.6
22.5°	3870.4	3843.0	3802.0	3797.4	3761.0	3742.8	3678.9	3606.0	3560.4	3505.6	3487.4
25°	3715.4	3701.6	3660.6	3656.1	3624.2	3601.4	3546.8	3478.2	3437.2	3382.6	3364.4
27.5°	3533.0	3519.4	3478.2	3478.2	3441.9	3428.1	3378.0	3314.2	3282.2	3232.1	3209.4
30°	3314.2	3296.0	3273.1	3268.6	3236.8	3223.0	3177.4	3118.1	3086.2	3045.2	3036.1
32.5°	3054.4	3040.6	3027.0	3022.4	2990.5	2976.9	2945.0	2885.6	2858.4	2821.9	2808.1
35°	2753.5	2744.4	2730.6	2726.1	2712.5	2698.8	2666.9	2621.2	2607.6	2580.2	2566.6
37.5°	2407.0	2416.1	2407.0	2407.0	2393.4	2397.9	2370.5	2343.1	2329.5	2311.2	2302.1
40°	2033.2	2051.4	2065.1	2065.1	2060.5	2078.8	2074.2	2051.4	2046.9	2037.8	2033.2
42.5°	1654.9	1663.9	1691.2	1709.5	1705.0	1750.5	1755.1	1773.4	1787.0	1777.9	1782.5
45°	1258.2	1285.5	1322.0	1340.2	1363.0	1422.4	1454.2	1490.8	1522.6	1540.9	1536.2
47.5°	907.1	939.1	980.1	1007.5	1048.5	1121.5	1203.5	1249.1	1294.6	1317.5	1340.2
50°	656.5	688.4	738.5	779.5	806.9	907.1	993.8	1053.1	1103.2	1135.1	1157.9
52.5°	460.4	496.9	551.6	588.1	629.1	724.9	825.1	893.5	948.2	989.2	1012.0
55°	319.1	360.1	410.2	446.8	492.4	592.6	688.4	761.2	820.6	857.0	884.4
57.5°	223.4	259.9	310.0	341.9	387.5	483.2	579.0	651.9	711.1	747.6	779.5
60°	150.5	186.9	237.0	269.0	305.4	401.1	487.8	565.2	620.0	656.5	688.4
62.5°	104.9	136.8	186.9	218.9	250.8	332.8	414.9	483.2	537.9	579.0	606.2
65°	82.0	109.4	150.5	177.8	209.8	278.1	346.5	405.8	460.4	501.5	519.8
67.5°	59.2	86.6	118.5	141.4	164.1	223.4	282.6	328.2	378.4	410.2	433.1
70°	41.0	59.2	86.6	104.9	123.1	168.6	214.2	255.2	291.8	314.5	332.8
72.5°	31.9	41.0	59.2	73.0	86.6	118.5	155.0	186.9	214.2	232.5	250.8
75°	18.2	27.4	41.0	50.1	59.2	82.0	104.9	127.6	145.9	159.5	168.6
77.5°	9.1	13.6	22.8	27.4	36.5	50.1	68.4	82.0	95.8	104.9	114.0
80°	9.1	9.1	13.6	13.6	18.2	27.4	36.5	45.6	54.8	63.9	68.4
82.5°	4.5	4.5	9.1	9.1	9.1	13.6	18.2	27.4	31.9	36.5	41.0
85°	4.5	4.5	4.5	4.5	4.5	9.1	9.1	13.6	18.2	22.8	22.8
87.5°	0.0	0.0	4.5	4.5	4.5	4.5	4.5	9.1	9.1	9.1	13.6
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: P252611

CATALOG NUMBER: LE\_6B50D010R EC6B30508035 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2	3943.2
2.5°	3929.6	3938.8	3934.1	3943.2	3929.6	3925.1	3934.1	3920.5
5°	3879.5	3884.0	3879.5	3879.5	3870.4	3861.2	3870.4	3856.6
7.5°	3802.0	3802.0	3788.2	3788.2	3770.1	3761.0	3761.0	3756.4
10°	3738.1	3724.5	3710.8	3715.4	3688.0	3678.9	3674.4	3669.8
12.5°	3706.2	3697.1	3674.4	3674.4	3647.0	3637.9	3633.2	3628.8
15°	3669.8	3651.5	3633.2	3628.8	3606.0	3596.9	3592.2	3583.1
17.5°	3606.0	3592.2	3569.5	3569.5	3546.8	3542.1	3533.0	3528.5
20°	3537.6	3519.4	3501.1	3501.1	3473.8	3473.8	3460.1	3464.6
22.5°	3441.9	3428.1	3409.9	3409.9	3387.1	3382.6	3368.9	3364.4
25°	3327.9	3309.6	3296.0	3291.4	3273.1	3264.0	3259.5	3250.4
27.5°	3177.4	3163.8	3150.1	3141.0	3118.1	3113.6	3099.9	3104.5
30°	2990.5	2981.4	2976.9	2967.8	2940.4	2931.2	2931.2	2917.6
32.5°	2785.4	2771.8	2762.6	2748.9	2726.1	2721.5	2707.9	2712.5
35°	2534.6	2516.4	2502.8	2507.2	2480.0	2475.4	2466.2	2470.9
37.5°	2274.8	2256.6	2238.4	2233.8	2211.0	2211.0	2197.2	2197.2
40°	2005.9	1987.6	1978.5	1978.5	1951.1	1955.8	1942.0	1937.5
42.5°	1764.2	1746.0	1741.4	1736.9	1723.2	1718.6	1705.0	1709.5
45°	1536.2	1531.8	1531.8	1522.6	1509.0	1504.4	1509.0	1509.0
47.5°	1335.8	1340.2	1335.8	1335.8	1326.6	1335.8	1326.6	1331.1
50°	1167.0	1176.1	1176.1	1176.1	1171.6	1176.1	1176.1	1180.8
52.5°	1025.8	1039.4	1034.9	1039.4	1034.9	1044.0	1039.4	1044.0
55°	902.6	911.8	916.2	920.9	920.9	920.9	920.9	920.9
57.5°	788.6	802.4	806.9	811.5	811.5	820.6	811.5	811.5
60°	697.5	711.1	715.8	720.2	720.2	724.9	715.8	720.2
62.5°	615.4	629.1	629.1	633.6	633.6	633.6	624.5	629.1
65°	533.4	537.9	542.5	542.5	537.9	537.9	533.4	537.9
67.5°	442.2	446.8	442.2	442.2	437.6	437.6	428.5	433.1
70°	341.9	341.9	346.5	341.9	337.4	341.9	337.4	332.8
72.5°	255.2	255.2	255.2	250.8	250.8	246.1	250.8	250.8
75°	173.2	173.2	177.8	177.8	177.8	177.8	173.2	173.2
77.5°	114.0	114.0	114.0	114.0	118.5	114.0	114.0	114.0
80°	73.0	73.0	77.5	77.5	73.0	73.0	73.0	73.0
82.5°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
85°	27.4	27.4	27.4	27.4	22.8	22.8	22.8	22.8
87.5°	13.6	13.6	13.6	13.6	13.6	13.6	9.1	9.1
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)