

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: P252619

Luminaire Tested: **LE_6B50D010R EC6B30509050 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252619
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 EC6B30509050 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: 5803.8 lumens
Efficiency: N/A
Efficacy: 98.7 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

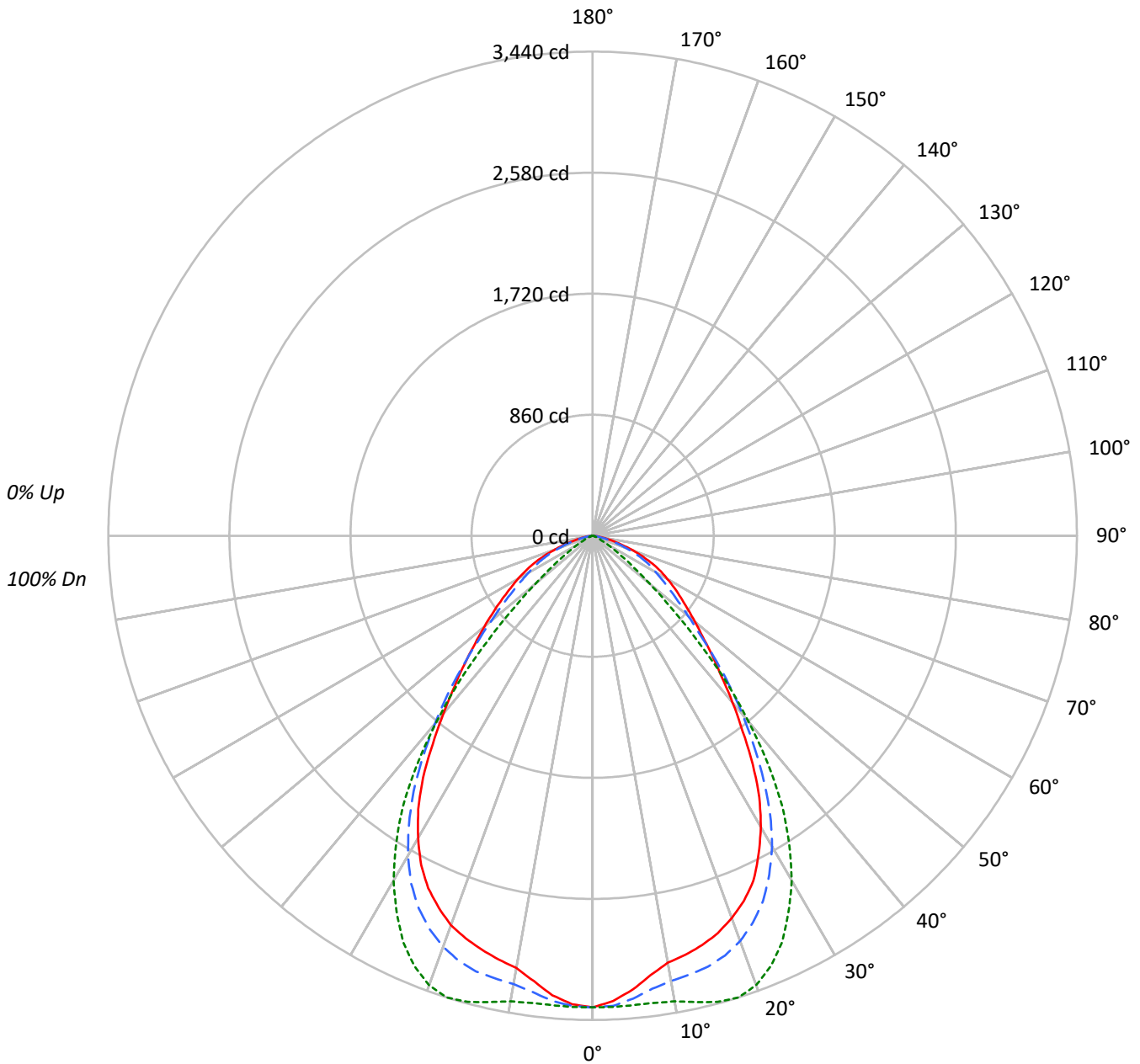
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	218608	218608	218608
5°	212089	219188	214623
10°	204014	222491	206585
15°	203295	231548	205652
20°	200639	235860	204395
25°	194640	229215	198823
30°	180054	213035	186767
35°	157966	187275	167221
40°	131632	146817	140217
45°	110800	96859	118301
50°	95934	53083	101821
55°	86798	28197	89004
60°	79855	14666	79855
65°	72370	7780	70564
70°	58370	4425	53944
75°	40054	2924	37105
80°	26224	1465	23294
85°	17366	2919	14522



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.5	5.4
10°-20°	903.5	15.6
20°-30°	1334.9	23.0
30°-40°	1348.4	23.2
40°-50°	929.4	16.0
50°-60°	533.8	9.2
60°-70°	310.7	5.4
70°-80°	113.4	2.0
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°	2550.9	44.0
0°-40°	3899.3	67.2
0°-60°	5362.4	92.4
0°-90°	5803.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5803.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3351	3351	3351	3351	3351	
5°	3238	3300	3347	3316	3277	304
15°	3010	3169	3428	3204	3045	848
25°	2704	2863	3184	2921	2762	1232
35°	1983	2119	2351	2216	2100	1231
45°	1201	1216	1050	1294	1282	934
55°	763	670	248	697	782	687
65°	469	395	50	391	457	459
75°	159	128	12	124	147	179
85°	23	12	4	16	19	30
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°	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8
2.5°	3308.1	3312.0	3315.9	3312.0	3315.9	3331.4	3319.8	3327.5	3327.5	3331.4	3343.0
5°	3238.5	3238.5	3246.2	3242.4	3254.0	3269.5	3257.9	3269.5	3273.4	3281.1	3300.4
7.5°	3149.4	3149.4	3153.2	3153.2	3168.8	3184.2	3176.5	3192.0	3207.5	3223.0	3246.2
10°	3079.6	3087.4	3087.4	3091.2	3106.8	3126.1	3122.2	3141.6	3157.1	3180.4	3211.4
12.5°	3048.6	3052.5	3052.5	3060.2	3075.8	3095.1	3091.2	3110.6	3133.9	3161.0	3192.0
15°	3009.9	3017.6	3013.8	3021.5	3037.0	3056.4	3052.5	3071.9	3099.0	3126.1	3168.8
17.5°	2959.5	2963.4	2967.2	2967.2	2982.8	2998.2	2998.2	3017.6	3048.6	3079.6	3126.1
20°	2889.9	2897.6	2897.6	2901.5	2913.0	2936.2	2932.4	2951.8	2982.8	3013.8	3064.1
22.5°	2808.5	2812.4	2812.4	2816.2	2835.6	2847.2	2851.1	2866.6	2893.8	2928.5	2975.0
25°	2703.9	2707.8	2703.9	2715.5	2723.2	2746.5	2738.8	2758.1	2789.1	2816.2	2862.8
27.5°	2552.8	2560.5	2560.5	2564.4	2583.8	2603.1	2603.1	2622.5	2649.6	2669.0	2715.5
30°	2390.1	2401.8	2390.1	2409.5	2417.2	2432.8	2444.4	2456.0	2479.2	2506.4	2548.9
32.5°	2204.1	2200.2	2204.1	2211.9	2235.1	2246.8	2254.5	2266.1	2289.4	2312.6	2347.5
35°	1983.4	1991.1	1995.0	2010.5	2010.5	2029.9	2033.8	2041.5	2076.4	2091.9	2119.0
37.5°	1750.9	1758.6	1762.5	1770.2	1785.8	1793.5	1805.1	1816.8	1840.0	1867.1	1882.6
40°	1545.6	1545.6	1549.5	1557.2	1568.9	1572.8	1584.4	1599.9	1615.4	1638.6	1654.1
42.5°	1352.0	1355.9	1352.0	1359.6	1371.2	1386.8	1382.9	1402.2	1406.1	1421.6	1433.2
45°	1200.9	1200.9	1193.1	1200.9	1200.9	1216.4	1212.5	1220.2	1216.4	1224.1	1216.4
47.5°	1057.5	1061.4	1057.5	1061.4	1061.4	1061.4	1065.2	1057.5	1061.4	1049.8	1026.5
50°	945.2	949.1	941.4	945.2	941.4	937.5	941.4	929.8	925.9	910.4	887.1
52.5°	848.4	844.5	840.6	840.6	840.6	836.8	832.9	821.2	809.6	794.1	767.0
55°	763.1	759.2	755.4	755.4	747.6	743.8	743.8	732.1	720.5	701.1	670.1
57.5°	685.6	681.8	677.9	677.9	674.0	666.2	666.2	654.6	639.1	615.9	588.8
60°	612.0	612.0	612.0	608.1	608.1	600.4	600.4	588.8	573.4	550.1	519.1
62.5°	546.2	542.4	542.4	542.4	542.4	538.5	534.6	526.9	511.4	488.1	461.0
65°	468.8	468.8	468.8	468.8	464.9	464.9	464.9	453.2	445.5	422.2	395.1
67.5°	383.5	383.5	383.5	383.5	379.6	383.5	383.5	375.8	368.0	344.8	321.5
70°	306.0	302.1	298.2	302.1	298.2	298.2	302.1	294.4	290.5	271.1	247.9
72.5°	224.6	228.5	224.6	224.6	224.6	220.8	224.6	220.8	213.0	197.5	182.1
75°	158.9	162.8	162.8	158.9	158.9	158.9	155.0	155.0	147.2	135.6	127.9
77.5°	108.5	108.5	108.5	108.5	104.6	104.6	104.6	100.8	96.9	89.1	81.4
80°	69.8	69.8	69.8	69.8	65.9	65.9	65.9	62.0	62.0	54.2	46.5
82.5°	42.6	42.6	42.6	42.6	42.6	42.6	38.8	38.8	34.9	31.0	27.1
85°	23.2	23.2	23.2	23.2	23.2	23.2	23.2	19.4	19.4	15.5	11.6
87.5°	7.8	7.8	11.6	11.6	11.6	11.6	11.6	11.6	7.8	7.8	7.8
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°	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8
2.5°	3335.2	3339.1	3339.1	3339.1	3350.8	3354.6	3343.0	3331.4	3354.6	3350.8	3358.5
5°	3296.5	3308.1	3315.9	3319.8	3331.4	3339.1	3327.5	3323.6	3343.0	3346.9	3350.8
7.5°	3250.1	3269.5	3288.9	3296.5	3312.0	3319.8	3315.9	3315.9	3339.1	3346.9	3346.9
10°	3219.1	3246.2	3269.5	3288.9	3308.1	3319.8	3319.8	3323.6	3350.8	3358.5	3366.2
12.5°	3211.4	3246.2	3277.2	3304.2	3319.8	3339.1	3343.0	3354.6	3381.8	3393.4	3393.4
15°	3192.0	3238.5	3277.2	3312.0	3335.2	3358.5	3366.2	3389.5	3420.5	3428.2	3436.0
17.5°	3157.1	3203.6	3250.1	3292.8	3323.6	3343.0	3366.2	3389.5	3428.2	3439.9	3443.8
20°	3095.1	3149.4	3195.9	3238.5	3269.5	3296.5	3319.8	3346.9	3381.8	3397.2	3401.1
22.5°	3002.1	3056.4	3102.9	3149.4	3180.4	3203.6	3226.9	3257.9	3292.8	3308.1	3308.1
25°	2889.9	2940.1	2990.5	3025.4	3056.4	3083.5	3095.1	3130.0	3164.9	3184.2	3184.2
27.5°	2746.5	2793.0	2839.5	2878.2	2897.6	2920.8	2940.1	2971.1	2998.2	3013.8	3029.2
30°	2564.4	2610.9	2653.5	2692.2	2715.5	2738.8	2758.1	2781.4	2808.5	2827.9	2831.8
32.5°	2366.9	2405.6	2448.2	2487.0	2510.2	2518.0	2537.2	2560.5	2583.8	2599.2	2603.1
35°	2149.9	2177.0	2204.1	2239.0	2262.2	2262.2	2281.6	2297.1	2316.5	2351.4	2343.6
37.5°	1894.2	1933.0	1952.4	1964.0	1979.5	1995.0	1998.9	2018.2	2041.5	2049.2	2060.9
40°	1654.1	1665.8	1677.4	1677.4	1692.9	1692.9	1692.9	1696.8	1720.0	1723.9	1739.4
42.5°	1413.9	1413.9	1402.2	1390.6	1394.5	1390.6	1371.2	1371.2	1382.9	1398.4	1398.4
45°	1189.2	1162.1	1127.2	1100.1	1080.8	1073.0	1049.8	1049.8	1045.9	1049.8	1065.2
47.5°	999.4	953.0	894.9	840.6	821.2	805.8	770.9	755.4	747.6	751.5	759.2
50°	840.6	790.2	724.4	658.5	623.6	604.2	561.8	534.6	530.8	523.0	538.5
52.5°	724.4	662.4	592.6	515.2	480.4	449.4	402.9	379.6	364.1	364.1	368.0
55°	623.6	557.9	480.4	402.9	368.0	344.8	298.2	267.2	251.8	247.9	259.5
57.5°	538.5	476.5	399.0	321.5	286.6	259.5	213.0	186.0	174.4	166.6	170.5
60°	472.6	410.6	333.1	259.5	228.5	197.5	158.9	127.9	112.4	112.4	116.2
62.5°	410.6	352.5	282.8	213.0	186.0	158.9	116.2	89.1	77.5	73.6	77.5
65°	348.6	294.4	236.2	178.2	151.1	127.9	93.0	69.8	54.2	50.4	54.2
67.5°	282.8	240.1	189.9	143.4	120.1	100.8	69.8	50.4	38.8	34.9	38.8
70°	220.8	182.1	143.4	104.6	89.1	73.6	50.4	38.8	27.1	23.2	27.1
72.5°	158.9	131.8	100.8	73.6	62.0	50.4	34.9	27.1	19.4	15.5	19.4
75°	108.5	89.1	65.9	46.5	38.8	34.9	23.2	15.5	11.6	11.6	11.6
77.5°	69.8	54.2	42.6	31.0	23.2	19.4	11.6	7.8	7.8	7.8	7.8
80°	38.8	31.0	23.2	15.5	11.6	11.6	7.8	7.8	3.9	3.9	3.9
82.5°	23.2	15.5	11.6	7.8	7.8	3.9	3.9	3.9	3.9	3.9	3.9
85°	11.6	7.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
87.5°	3.9	3.9	3.9	3.9	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°	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8
2.5°	3343.0	3346.9	3335.2	3350.8	3339.1	3354.6	3354.6	3339.1	3343.0	3335.2	3350.8
5°	3335.2	3335.2	3327.5	3339.1	3323.6	3339.1	3335.2	3308.1	3315.9	3300.4	3315.9
7.5°	3335.2	3327.5	3315.9	3327.5	3308.1	3319.8	3304.2	3277.2	3269.5	3250.1	3250.1
10°	3346.9	3335.2	3319.8	3323.6	3304.2	3308.1	3285.0	3246.2	3234.6	3211.4	3203.6
12.5°	3374.0	3362.4	3339.1	3346.9	3319.8	3319.8	3288.9	3242.4	3219.1	3188.1	3180.4
15°	3412.8	3393.4	3366.2	3370.1	3343.0	3327.5	3288.9	3234.6	3203.6	3161.0	3149.4
17.5°	3420.5	3401.1	3366.2	3366.2	3331.4	3312.0	3265.6	3203.6	3164.9	3122.2	3099.0
20°	3377.9	3358.5	3319.8	3315.9	3285.0	3257.9	3207.5	3145.5	3106.8	3060.2	3040.9
22.5°	3288.9	3265.6	3230.8	3226.9	3195.9	3180.4	3126.1	3064.1	3025.4	2978.9	2963.4
25°	3157.1	3145.5	3110.6	3106.8	3079.6	3060.2	3013.8	2955.6	2920.8	2874.4	2858.9
27.5°	3002.1	2990.5	2955.6	2955.6	2924.6	2913.0	2870.5	2816.2	2789.1	2746.5	2727.1
30°	2816.2	2800.8	2781.4	2777.5	2750.4	2738.8	2700.0	2649.6	2622.5	2587.6	2579.9
32.5°	2595.4	2583.8	2572.1	2568.2	2541.1	2529.5	2502.5	2452.1	2428.9	2397.9	2386.2
35°	2339.8	2332.0	2320.4	2316.5	2304.9	2293.2	2266.1	2227.4	2215.8	2192.5	2180.9
37.5°	2045.4	2053.1	2045.4	2045.4	2033.8	2037.6	2014.4	1991.1	1979.5	1964.0	1956.2
40°	1727.8	1743.2	1754.8	1754.8	1750.9	1766.4	1762.5	1743.2	1739.4	1731.6	1727.8
42.5°	1406.1	1413.9	1437.1	1452.6	1448.8	1487.5	1491.4	1506.9	1518.5	1510.8	1514.6
45°	1069.1	1092.4	1123.4	1138.9	1158.2	1208.6	1235.8	1266.8	1293.9	1309.4	1305.5
47.5°	770.9	798.0	832.9	856.1	891.0	953.0	1022.6	1061.4	1100.1	1119.5	1138.9
50°	557.9	584.9	627.5	662.4	685.6	770.9	844.5	894.9	937.5	964.6	983.9
52.5°	391.2	422.2	468.8	499.8	534.6	615.9	701.1	759.2	805.8	840.6	860.0
55°	271.1	306.0	348.6	379.6	418.4	503.6	584.9	646.9	697.2	728.2	751.5
57.5°	189.9	220.8	263.4	290.5	329.2	410.6	492.0	554.0	604.2	635.2	662.4
60°	127.9	158.9	201.4	228.5	259.5	340.9	414.5	480.4	526.9	557.9	584.9
62.5°	89.1	116.2	158.9	186.0	213.0	282.8	352.5	410.6	457.1	492.0	515.2
65°	69.8	93.0	127.9	151.1	178.2	236.2	294.4	344.8	391.2	426.1	441.6
67.5°	50.4	73.6	100.8	120.1	139.5	189.9	240.1	278.9	321.5	348.6	368.0
70°	34.9	50.4	73.6	89.1	104.6	143.4	182.1	216.9	247.9	267.2	282.8
72.5°	27.1	34.9	50.4	62.0	73.6	100.8	131.8	158.9	182.1	197.5	213.0
75°	15.5	23.2	34.9	42.6	50.4	69.8	89.1	108.5	124.0	135.6	143.4
77.5°	7.8	11.6	19.4	23.2	31.0	42.6	58.1	69.8	81.4	89.1	96.9
80°	7.8	7.8	11.6	11.6	15.5	23.2	31.0	38.8	46.5	54.2	58.1
82.5°	3.9	3.9	7.8	7.8	7.8	11.6	15.5	23.2	27.1	31.0	34.9
85°	3.9	3.9	3.9	3.9	3.9	7.8	7.8	11.6	15.5	19.4	19.4
87.5°	0.0	0.0	3.9	3.9	3.9	3.9	3.9	7.8	7.8	7.8	11.6
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: P252619

CATALOG NUMBER: LE_6B50D010R EC6B30509050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8	3350.8
2.5°	3339.1	3346.9	3343.0	3350.8	3339.1	3335.2	3343.0	3331.4
5°	3296.5	3300.4	3296.5	3296.5	3288.9	3281.1	3288.9	3277.2
7.5°	3230.8	3230.8	3219.1	3219.1	3203.6	3195.9	3195.9	3192.0
10°	3176.5	3164.9	3153.2	3157.1	3133.9	3126.1	3122.2	3118.4
12.5°	3149.4	3141.6	3122.2	3122.2	3099.0	3091.2	3087.4	3083.5
15°	3118.4	3102.9	3087.4	3083.5	3064.1	3056.4	3052.5	3044.8
17.5°	3064.1	3052.5	3033.1	3033.1	3013.8	3009.9	3002.1	2998.2
20°	3006.0	2990.5	2975.0	2975.0	2951.8	2951.8	2940.1	2944.0
22.5°	2924.6	2913.0	2897.6	2897.6	2878.2	2874.4	2862.8	2858.9
25°	2827.9	2812.4	2800.8	2796.9	2781.4	2773.6	2769.8	2762.0
27.5°	2700.0	2688.4	2676.8	2669.0	2649.6	2645.8	2634.1	2638.0
30°	2541.1	2533.4	2529.5	2521.8	2498.6	2490.9	2490.9	2479.2
32.5°	2366.9	2355.2	2347.5	2335.9	2316.5	2312.6	2301.0	2304.9
35°	2153.8	2138.2	2126.8	2130.6	2107.4	2103.5	2095.8	2099.6
37.5°	1933.0	1917.5	1902.0	1898.1	1878.8	1878.8	1867.1	1867.1
40°	1704.5	1689.0	1681.2	1681.2	1658.0	1661.9	1650.2	1646.4
42.5°	1499.1	1483.6	1479.8	1475.9	1464.2	1460.4	1448.8	1452.6
45°	1305.5	1301.6	1301.6	1293.9	1282.2	1278.4	1282.2	1282.2
47.5°	1135.0	1138.9	1135.0	1135.0	1127.2	1135.0	1127.2	1131.1
50°	991.6	999.4	999.4	999.4	995.5	999.4	999.4	1003.2
52.5°	871.6	883.2	879.4	883.2	879.4	887.1	883.2	887.1
55°	767.0	774.8	778.6	782.5	782.5	782.5	782.5	782.5
57.5°	670.1	681.8	685.6	689.5	689.5	697.2	689.5	689.5
60°	592.6	604.2	608.1	612.0	612.0	615.9	608.1	612.0
62.5°	523.0	534.6	534.6	538.5	538.5	538.5	530.8	534.6
65°	453.2	457.1	461.0	461.0	457.1	457.1	453.2	457.1
67.5°	375.8	379.6	375.8	375.8	371.9	371.9	364.1	368.0
70°	290.5	290.5	294.4	290.5	286.6	290.5	286.6	282.8
72.5°	216.9	216.9	216.9	213.0	213.0	209.1	213.0	213.0
75°	147.2	147.2	151.1	151.1	151.1	151.1	147.2	147.2
77.5°	96.9	96.9	96.9	96.9	100.8	96.9	96.9	96.9
80°	62.0	62.0	65.9	65.9	62.0	62.0	62.0	62.0
82.5°	38.8	38.8	38.8	38.8	38.8	38.8	38.8	38.8
85°	23.2	23.2	23.2	23.2	19.4	19.4	19.4	19.4
87.5°	11.6	11.6	11.6	11.6	11.6	11.6	7.8	7.8
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)