

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: P252735

Luminaire Tested: **LE_6B60D010R EC6B60709040 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252735
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B60D010R EC6B60709040 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6047.5 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

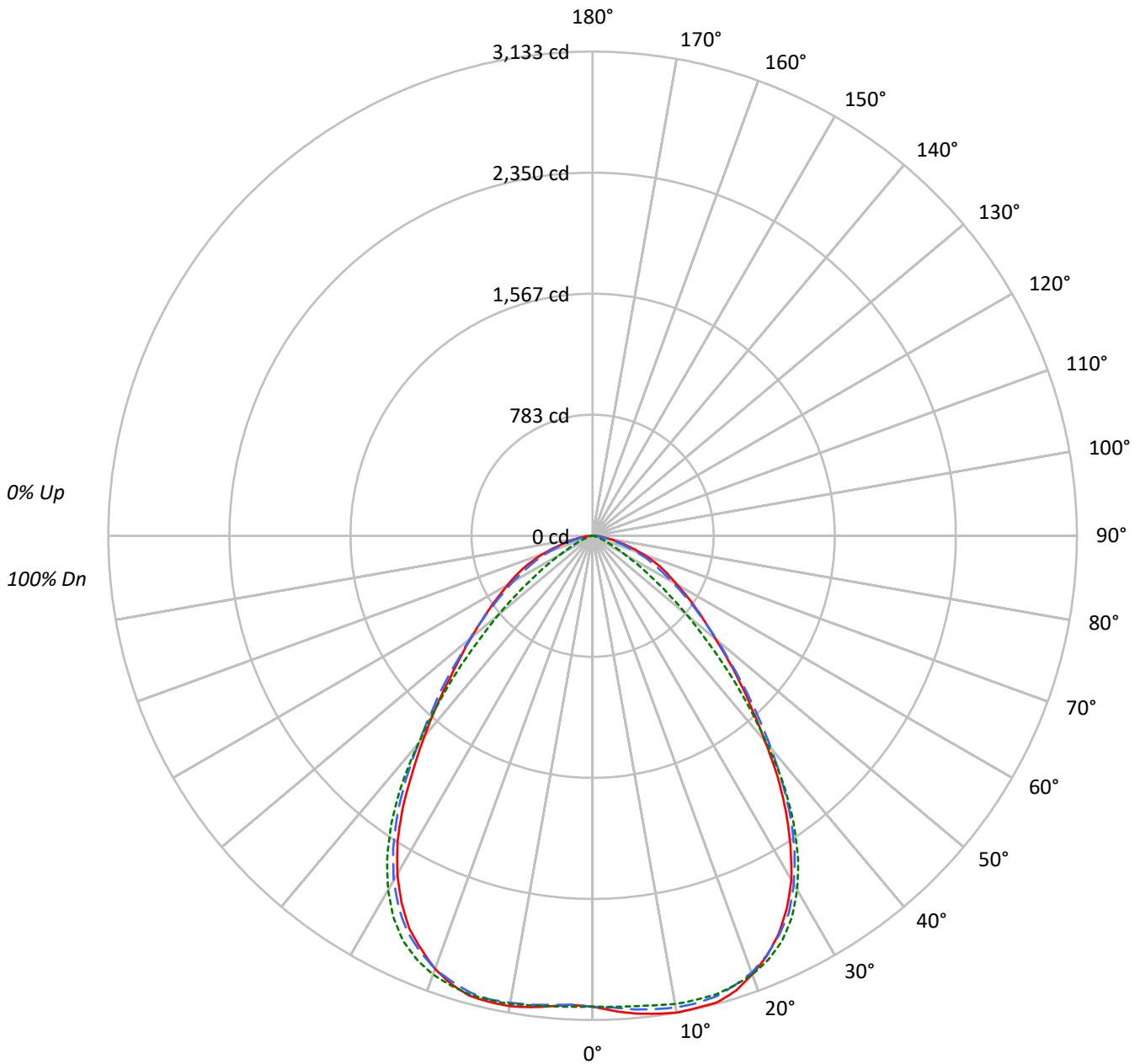
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	198782	198782	198782
5°	203208	200104	200104
10°	207552	203842	204703
15°	211028	207543	208124
20°	209741	209741	207047
25°	204740	208469	201954
30°	193818	199340	190247
35°	173672	180545	170239
40°	147549	149380	143879
45°	124852	114122	120479
50°	105414	80487	104095
55°	92644	51969	91666
60°	82099	30924	82660
65°	75828	18617	75828
70°	65771	10682	64111
75°	52153	6529	48876
80°	38848	4847	37232
85°	35481	3144	32263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.3	4.9
10°-20°	868.2	14.4
20°-30°	1305.7	21.6
30°-40°	1372.8	22.7
40°-50°	1025.5	17.0
50°-60°	638.4	10.6
60°-70°	363.1	6.0
70°-80°	149.5	2.5
80°-90°	30.9	0.5
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°	2467.2	40.8
0°-40°	3840.0	63.5
0°-60°	5504.0	91.0
0°-90°	6047.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6047.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3047	3047	3047	3047	3047	
5°	3103	3077	3056	3047	3056	297
15°	3124	3086	3073	3060	3081	878
25°	2844	2853	2896	2831	2806	1302
35°	2181	2237	2267	2202	2138	1353
45°	1353	1383	1237	1358	1306	1049
55°	814	797	457	784	806	733
65°	491	440	121	440	491	484
75°	207	164	26	160	194	225
85°	47	30	4	26	43	53
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°	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9
2.5°	3077.0	3072.8	3077.0	3068.4	3064.1	3064.1	3068.4	3059.8	3055.5	3059.8	3055.5
5°	3102.9	3094.2	3098.6	3094.2	3085.6	3085.6	3090.0	3077.0	3077.0	3081.4	3077.0
7.5°	3120.1	3120.1	3120.1	3111.5	3107.2	3102.9	3111.5	3098.6	3094.2	3094.2	3090.0
10°	3133.0	3128.8	3133.0	3124.4	3115.9	3111.5	3120.1	3111.5	3102.9	3111.5	3098.6
12.5°	3128.8	3128.8	3128.8	3124.4	3115.9	3111.5	3120.1	3107.2	3102.9	3107.2	3098.6
15°	3124.4	3111.5	3115.9	3111.5	3098.6	3098.6	3102.9	3090.0	3081.4	3094.2	3085.6
17.5°	3085.6	3077.0	3081.4	3072.8	3064.1	3059.8	3064.1	3059.8	3051.1	3059.8	3051.1
20°	3021.0	3021.0	3025.2	3016.8	3008.1	3003.8	3012.4	3003.8	2995.1	3008.1	3008.1
22.5°	2943.4	2943.4	2943.4	2939.1	2934.8	2934.8	2934.8	2930.5	2926.2	2934.8	2939.1
25°	2844.2	2840.0	2844.2	2848.6	2844.2	2840.0	2844.2	2844.2	2835.8	2852.9	2852.9
27.5°	2719.4	2719.4	2728.0	2723.6	2723.6	2719.4	2728.0	2728.0	2723.6	2736.6	2749.5
30°	2572.8	2564.2	2572.8	2572.8	2577.1	2577.1	2581.4	2581.4	2581.4	2594.4	2603.0
32.5°	2383.1	2387.5	2400.4	2396.1	2391.8	2404.8	2404.8	2413.4	2417.6	2426.2	2430.6
35°	2180.6	2185.0	2185.0	2189.2	2197.9	2189.2	2210.8	2206.5	2210.8	2228.0	2236.6
37.5°	1965.1	1952.2	1973.8	1965.1	1969.5	1969.5	1978.1	1982.4	1995.4	2016.9	2016.9
40°	1732.5	1736.8	1745.4	1749.6	1754.0	1754.0	1754.0	1766.9	1771.2	1797.1	1792.8
42.5°	1529.9	1529.9	1538.5	1542.9	1542.9	1542.9	1542.9	1555.8	1564.4	1573.0	1581.6
45°	1353.2	1340.2	1348.9	1348.9	1357.5	1353.2	1361.9	1370.5	1374.8	1387.6	1383.4
47.5°	1185.1	1180.9	1185.1	1189.5	1185.1	1189.5	1193.8	1198.0	1202.4	1202.4	1202.4
50°	1038.6	1038.6	1042.9	1047.2	1047.2	1047.2	1047.2	1051.5	1051.5	1060.1	1051.5
52.5°	917.9	922.2	922.2	917.9	922.2	922.2	926.5	926.5	922.2	922.2	909.4
55°	814.5	810.2	814.5	810.2	814.5	814.5	810.2	810.2	805.9	801.6	797.2
57.5°	715.4	715.4	715.4	715.4	711.1	715.4	711.1	706.8	706.8	698.1	685.2
60°	629.2	629.2	629.2	629.2	629.2	624.9	629.2	624.9	616.2	607.6	590.4
62.5°	555.9	551.6	555.9	551.6	551.6	547.4	547.4	543.0	534.4	525.8	508.5
65°	491.2	495.6	491.2	491.2	487.0	482.6	482.6	478.4	465.4	456.9	439.6
67.5°	422.4	418.0	418.0	418.0	413.8	413.8	413.8	405.1	396.5	383.5	366.4
70°	344.8	344.8	344.8	340.5	340.5	336.1	336.1	331.9	323.2	314.6	293.0
72.5°	271.5	271.5	271.5	262.9	267.2	262.9	262.9	254.2	250.0	237.0	224.1
75°	206.9	206.9	202.5	202.5	198.2	193.9	193.9	189.6	185.2	176.8	163.8
77.5°	150.9	150.9	150.9	146.5	142.2	137.9	137.9	133.6	129.2	125.0	116.4
80°	103.4	103.4	103.4	103.4	99.1	94.8	94.8	90.5	90.5	86.2	77.6
82.5°	69.0	69.0	69.0	69.0	64.6	64.6	64.6	60.4	56.0	56.0	47.4
85°	47.4	47.4	43.1	43.1	43.1	43.1	38.8	38.8	34.5	30.1	30.1
87.5°	25.9	25.9	25.9	25.9	21.5	21.5	21.5	21.5	17.2	17.2	12.9
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°	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9
2.5°	3068.4	3068.4	3064.1	3051.1	3055.5	3051.1	3055.5	3051.1	3038.2	3051.1	3038.2
5°	3085.6	3090.0	3081.4	3064.1	3068.4	3064.1	3064.1	3059.8	3046.9	3055.5	3046.9
7.5°	3102.9	3098.6	3094.2	3077.0	3081.4	3077.0	3077.0	3068.4	3055.5	3064.1	3051.1
10°	3111.5	3111.5	3102.9	3085.6	3085.6	3081.4	3085.6	3081.4	3064.1	3077.0	3068.4
12.5°	3111.5	3107.2	3107.2	3085.6	3090.0	3085.6	3090.0	3081.4	3068.4	3077.0	3072.8
15°	3098.6	3098.6	3094.2	3072.8	3077.0	3077.0	3081.4	3072.8	3059.8	3072.8	3064.1
17.5°	3072.8	3072.8	3068.4	3051.1	3059.8	3059.8	3064.1	3055.5	3042.5	3051.1	3051.1
20°	3021.0	3025.2	3025.2	3012.4	3021.0	3021.0	3025.2	3021.0	3016.8	3021.0	3012.4
22.5°	2960.6	2969.2	2969.2	2956.4	2965.0	2965.0	2977.9	2973.6	2965.0	2969.2	2965.0
25°	2870.1	2878.8	2887.4	2878.8	2887.4	2887.4	2900.4	2896.0	2887.4	2896.0	2883.1
27.5°	2766.8	2771.0	2779.6	2771.0	2784.0	2779.6	2792.6	2788.2	2775.4	2788.2	2784.0
30°	2620.2	2637.5	2650.4	2637.5	2650.4	2650.4	2659.0	2654.8	2650.4	2646.1	2646.1
32.5°	2456.5	2473.8	2473.8	2469.4	2478.0	2478.0	2482.2	2473.8	2469.4	2473.8	2478.0
35°	2253.9	2262.5	2271.1	2266.9	2271.1	2275.5	2271.1	2275.5	2262.5	2266.9	2266.9
37.5°	2034.1	2042.8	2042.8	2029.8	2038.4	2038.4	2029.8	2029.8	2021.1	2029.8	2012.6
40°	1801.4	1792.8	1797.1	1788.5	1779.9	1779.9	1775.5	1758.2	1749.6	1754.0	1758.2
42.5°	1573.0	1573.0	1560.0	1538.5	1517.0	1517.0	1504.0	1495.4	1478.1	1486.8	1482.5
45°	1379.0	1357.5	1340.2	1305.8	1292.9	1284.2	1262.8	1241.1	1232.5	1236.9	1232.5
47.5°	1193.8	1176.5	1133.4	1086.0	1073.1	1060.1	1034.2	1008.4	999.9	991.2	991.2
50°	1038.6	1008.4	961.0	909.4	887.8	866.2	831.8	805.9	788.6	793.0	793.0
52.5°	896.4	861.9	805.9	741.2	715.4	689.5	659.4	629.2	616.2	612.0	612.0
55°	771.4	732.6	676.6	603.4	581.8	551.6	512.9	478.4	461.1	456.9	465.4
57.5°	659.4	624.9	560.2	487.0	461.1	431.0	392.1	362.0	340.5	336.1	340.5
60°	568.9	521.5	465.4	396.5	362.0	336.1	293.0	267.2	245.6	237.0	241.4
62.5°	478.4	435.2	379.2	310.2	284.4	258.6	219.8	189.6	172.4	168.1	172.4
65°	409.4	366.4	314.6	254.2	228.4	202.5	168.1	137.9	125.0	120.6	125.0
67.5°	340.5	301.6	258.6	202.5	181.0	159.5	125.0	103.4	86.2	81.9	86.2
70°	275.8	241.4	198.2	159.5	137.9	120.6	94.8	73.2	60.4	56.0	60.4
72.5°	206.9	181.0	150.9	116.4	103.4	90.5	69.0	51.8	43.1	38.8	43.1
75°	150.9	129.2	107.8	81.9	73.2	64.6	47.4	34.5	30.1	25.9	30.1
77.5°	103.4	90.5	73.2	56.0	47.4	43.1	30.1	25.9	21.5	17.2	17.2
80°	69.0	60.4	47.4	38.8	34.5	30.1	21.5	17.2	12.9	12.9	12.9
82.5°	43.1	34.5	30.1	21.5	17.2	17.2	12.9	8.6	8.6	8.6	8.6
85°	25.9	21.5	17.2	12.9	8.6	8.6	4.2	4.2	4.2	4.2	4.2
87.5°	12.9	8.6	8.6	4.2	4.2	4.2	4.2	4.2	0.0	0.0	4.2
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°	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9
2.5°	3046.9	3038.2	3038.2	3042.5	3046.9	3051.1	3042.5	3038.2	3038.2	3051.1	3042.5
5°	3046.9	3042.5	3042.5	3042.5	3051.1	3055.5	3046.9	3042.5	3046.9	3059.8	3055.5
7.5°	3059.8	3051.1	3055.5	3055.5	3059.8	3068.4	3059.8	3055.5	3059.8	3072.8	3064.1
10°	3068.4	3059.8	3064.1	3059.8	3072.8	3077.0	3068.4	3064.1	3068.4	3085.6	3081.4
12.5°	3072.8	3068.4	3068.4	3064.1	3077.0	3081.4	3072.8	3068.4	3072.8	3085.6	3081.4
15°	3064.1	3059.8	3059.8	3059.8	3068.4	3077.0	3064.1	3059.8	3059.8	3072.8	3068.4
17.5°	3046.9	3038.2	3038.2	3038.2	3042.5	3046.9	3033.9	3029.6	3025.2	3038.2	3033.9
20°	3016.8	3008.1	2999.5	2999.5	3003.8	3003.8	2995.1	2982.2	2982.2	2986.5	2977.9
22.5°	2960.6	2956.4	2947.8	2943.4	2952.0	2947.8	2930.5	2917.6	2913.2	2917.6	2909.0
25°	2883.1	2874.5	2870.1	2865.9	2870.1	2865.9	2848.6	2831.4	2831.4	2831.4	2818.5
27.5°	2775.4	2766.8	2762.4	2762.4	2766.8	2758.1	2740.9	2723.6	2715.0	2715.0	2702.1
30°	2637.5	2637.5	2633.1	2628.9	2624.5	2624.5	2598.6	2581.4	2572.8	2577.1	2568.5
32.5°	2469.4	2465.1	2460.8	2447.9	2452.1	2447.9	2426.2	2413.4	2400.4	2391.8	2387.5
35°	2253.9	2253.9	2249.6	2249.6	2249.6	2245.2	2223.8	2210.8	2202.1	2197.9	2185.0
37.5°	2016.9	2012.6	2008.2	2008.2	2008.2	2008.2	1995.4	1982.4	1982.4	1978.1	1969.5
40°	1749.6	1754.0	1758.2	1754.0	1766.9	1779.9	1762.6	1754.0	1749.6	1762.6	1745.4
42.5°	1491.1	1486.8	1508.4	1512.6	1512.6	1534.2	1538.5	1542.9	1538.5	1547.1	1547.1
45°	1241.1	1236.9	1258.4	1267.0	1288.5	1314.4	1327.4	1348.9	1357.5	1366.1	1357.5
47.5°	1004.1	1021.4	1038.6	1060.1	1077.4	1120.5	1146.4	1167.9	1176.5	1189.5	1189.5
50°	805.9	823.1	853.2	870.5	892.1	943.8	986.9	1017.0	1034.2	1047.2	1042.9
52.5°	620.6	650.8	689.5	706.8	736.9	797.2	844.6	879.1	900.8	913.6	917.9
55°	478.4	504.2	543.0	568.9	599.0	663.6	724.0	762.8	784.4	801.6	810.2
57.5°	353.4	383.5	426.6	448.2	482.6	555.9	607.6	655.0	680.9	702.5	706.8
60°	258.6	288.8	327.5	353.4	387.9	461.1	521.5	564.5	594.8	612.0	620.6
62.5°	185.2	215.5	254.2	280.1	310.2	374.9	435.2	478.4	508.5	530.1	543.0
65°	133.6	163.8	202.5	224.1	250.0	310.2	366.4	409.4	439.6	465.4	474.0
67.5°	99.1	120.6	155.1	176.8	202.5	250.0	297.4	336.1	366.4	387.9	396.5
70°	73.2	90.5	120.6	133.6	150.9	193.9	232.8	267.2	293.0	310.2	318.9
72.5°	51.8	64.6	86.2	99.1	112.0	146.5	176.8	202.5	219.8	237.0	245.6
75°	34.5	43.1	60.4	69.0	77.6	103.4	125.0	146.5	159.5	172.4	176.8
77.5°	21.5	30.1	43.1	47.4	56.0	69.0	86.2	99.1	107.8	116.4	125.0
80°	12.9	17.2	25.9	30.1	34.5	47.4	56.0	64.6	73.2	81.9	86.2
82.5°	8.6	12.9	17.2	17.2	21.5	25.9	34.5	43.1	47.4	51.8	56.0
85°	4.2	4.2	8.6	8.6	12.9	12.9	17.2	21.5	25.9	30.1	34.5
87.5°	4.2	4.2	4.2	4.2	8.6	8.6	12.9	12.9	12.9	17.2	17.2
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: P252735

CATALOG NUMBER: LE_6B60D010R EC6B60709040 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9	3046.9
2.5°	3033.9	3046.9	3033.9	3042.5	3038.2	3038.2	3033.9	3038.2
5°	3046.9	3064.1	3046.9	3059.8	3051.1	3051.1	3051.1	3055.5
7.5°	3059.8	3077.0	3064.1	3077.0	3072.8	3068.4	3068.4	3077.0
10°	3072.8	3085.6	3077.0	3090.0	3085.6	3081.4	3081.4	3090.0
12.5°	3072.8	3090.0	3081.4	3094.2	3090.0	3085.6	3085.6	3090.0
15°	3059.8	3081.4	3068.4	3081.4	3077.0	3072.8	3072.8	3081.4
17.5°	3021.0	3038.2	3029.6	3038.2	3038.2	3033.9	3038.2	3042.5
20°	2969.2	2982.2	2973.6	2982.2	2982.2	2973.6	2977.9	2982.2
22.5°	2896.0	2909.0	2900.4	2909.0	2904.6	2900.4	2900.4	2896.0
25°	2805.5	2822.8	2809.9	2818.5	2809.9	2801.2	2801.2	2805.5
27.5°	2693.5	2706.4	2689.1	2697.8	2689.1	2680.5	2680.5	2676.2
30°	2547.0	2551.2	2538.4	2547.0	2538.4	2534.0	2525.4	2525.4
32.5°	2370.2	2374.6	2361.6	2361.6	2353.0	2353.0	2335.8	2348.8
35°	2163.4	2167.8	2163.4	2159.1	2146.1	2141.9	2137.5	2137.5
37.5°	1947.9	1947.9	1935.0	1930.6	1922.1	1913.5	1917.8	1904.9
40°	1728.1	1723.9	1710.9	1715.2	1710.9	1698.0	1693.6	1689.4
42.5°	1521.2	1521.2	1508.4	1512.6	1504.0	1499.8	1486.8	1491.1
45°	1340.2	1340.2	1327.4	1327.4	1323.0	1310.1	1314.4	1305.8
47.5°	1176.5	1176.5	1172.2	1172.2	1159.2	1155.0	1155.0	1155.0
50°	1034.2	1034.2	1034.2	1034.2	1030.0	1025.6	1021.4	1025.6
52.5°	913.6	922.2	917.9	917.9	913.6	909.4	905.0	905.0
55°	805.9	810.2	810.2	814.5	810.2	805.9	810.2	805.9
57.5°	711.1	719.8	719.8	719.8	719.8	719.8	715.4	711.1
60°	629.2	633.5	633.5	637.9	637.9	637.9	633.5	633.5
62.5°	547.4	555.9	560.2	560.2	564.5	560.2	560.2	560.2
65°	482.6	491.2	495.6	491.2	495.6	495.6	491.2	491.2
67.5°	405.1	413.8	413.8	413.8	413.8	418.0	413.8	413.8
70°	327.5	336.1	331.9	336.1	336.1	336.1	336.1	336.1
72.5°	250.0	254.2	258.6	258.6	262.9	258.6	258.6	258.6
75°	181.0	189.6	189.6	189.6	189.6	193.9	193.9	193.9
77.5°	129.2	133.6	133.6	137.9	137.9	137.9	137.9	142.2
80°	90.5	90.5	94.8	94.8	99.1	99.1	99.1	99.1
82.5°	60.4	64.6	64.6	64.6	64.6	64.6	64.6	64.6
85°	34.5	38.8	38.8	38.8	38.8	43.1	43.1	43.1
87.5°	21.5	21.5	21.5	21.5	21.5	21.5	17.2	17.2
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)