

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: P252713

Luminaire Tested: **LE_6B50D010R EC6B30508027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252713
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_6B50D010R EC6B30508027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5966.2 lumens
Efficiency: N/A
Efficacy: 101.5 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

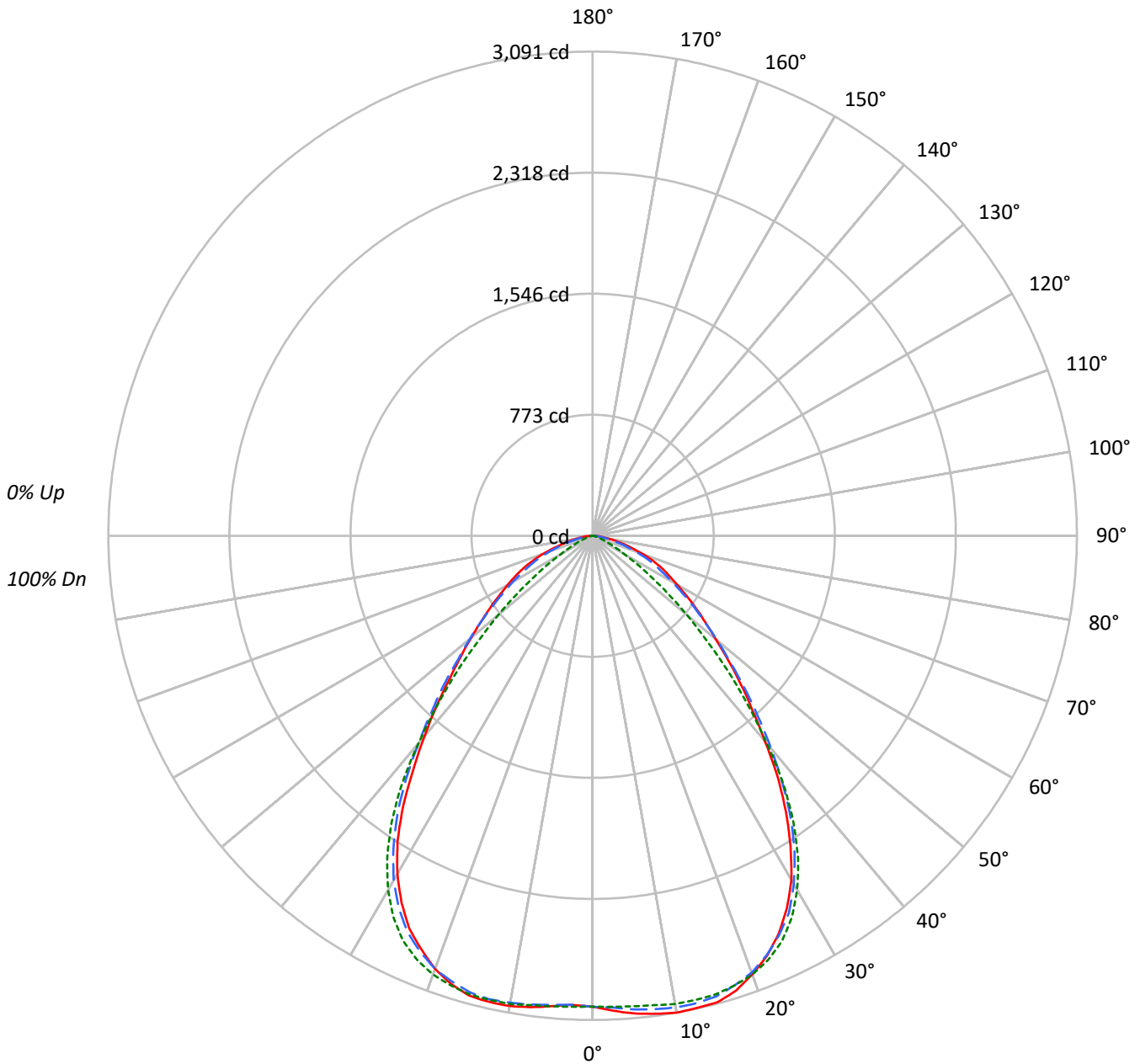
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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								
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°	196107	196107	196107
5°	200477	197413	197413
10°	204770	201100	201954
15°	208198	204747	205328
20°	206922	206922	204263
25°	201997	205669	199247
30°	191211	196658	187693
35°	171346	178116	167961
40°	145557	147371	141937
45°	123173	112581	118855
50°	103993	79390	102704
55°	91404	51253	90426
60°	81003	30520	81551
65°	74840	18370	74840
70°	64874	10529	63253
75°	51448	6428	48246
80°	38322	4809	36744
85°	35032	3144	31813



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.4	4.9
10°-20°	856.5	14.4
20°-30°	1288.1	21.6
30°-40°	1354.4	22.7
40°-50°	1011.8	17.0
50°-60°	629.9	10.6
60°-70°	358.2	6.0
70°-80°	147.5	2.5
80°-90°	30.5	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°	2434.0	40.8
0°-40°	3788.4	63.5
0°-60°	5430.0	91.0
0°-90°	5966.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5966.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3006	3006	3006	3006	3006	
5°	3061	3036	3014	3006	3014	293
15°	3082	3044	3031	3019	3040	867
25°	2806	2815	2857	2793	2768	1284
35°	2151	2207	2236	2173	2109	1335
45°	1335	1365	1220	1339	1288	1034
55°	804	786	451	774	795	723
65°	485	434	119	434	485	477
75°	204	162	26	157	191	222
85°	47	30	4	26	42	52
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°	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9
2.5°	3035.6	3031.4	3035.6	3027.1	3022.9	3022.9	3027.1	3018.6	3014.4	3018.6	3014.4
5°	3061.2	3052.8	3057.0	3052.8	3044.2	3044.2	3048.5	3035.6	3035.6	3040.0	3035.6
7.5°	3078.2	3078.2	3078.2	3069.8	3065.5	3061.2	3069.8	3057.0	3052.8	3052.8	3048.5
10°	3091.0	3086.8	3091.0	3082.5	3074.0	3069.8	3078.2	3069.8	3061.2	3069.8	3057.0
12.5°	3086.8	3086.8	3086.8	3082.5	3074.0	3069.8	3078.2	3065.5	3061.2	3065.5	3057.0
15°	3082.5	3069.8	3074.0	3069.8	3057.0	3057.0	3061.2	3048.5	3040.0	3052.8	3044.2
17.5°	3044.2	3035.6	3040.0	3031.4	3022.9	3018.6	3022.9	3018.6	3010.1	3018.6	3010.1
20°	2980.4	2980.4	2984.6	2976.1	2967.6	2963.4	2971.9	2963.4	2954.9	2967.6	2967.6
22.5°	2903.9	2903.9	2903.9	2899.6	2895.4	2895.4	2895.4	2891.1	2886.9	2895.4	2899.6
25°	2806.1	2801.9	2806.1	2810.4	2806.1	2801.9	2806.1	2806.1	2797.6	2814.6	2814.6
27.5°	2682.8	2682.8	2691.2	2687.0	2687.0	2682.8	2691.2	2691.2	2687.0	2699.8	2712.5
30°	2538.2	2529.8	2538.2	2538.2	2542.5	2542.5	2546.8	2546.8	2546.8	2559.5	2568.0
32.5°	2351.1	2355.4	2368.1	2363.9	2359.6	2372.4	2372.4	2380.9	2385.1	2393.6	2397.9
35°	2151.4	2155.6	2155.6	2159.9	2168.4	2159.9	2181.1	2176.9	2181.1	2198.1	2206.6
37.5°	1938.8	1926.0	1947.2	1938.8	1943.0	1943.0	1951.5	1955.8	1968.5	1989.8	1989.8
40°	1709.1	1713.4	1721.9	1726.1	1730.4	1730.4	1730.4	1743.1	1747.4	1773.0	1768.8
42.5°	1509.4	1509.4	1517.9	1522.1	1522.1	1522.1	1522.1	1534.9	1543.4	1551.9	1560.4
45°	1335.0	1322.2	1330.8	1330.8	1339.2	1335.0	1343.5	1352.0	1356.2	1369.0	1364.8
47.5°	1169.2	1165.0	1169.2	1173.5	1169.2	1173.5	1177.8	1182.0	1186.2	1186.2	1186.2
50°	1024.6	1024.6	1028.9	1033.1	1033.1	1033.1	1033.1	1037.4	1037.4	1045.9	1037.4
52.5°	905.6	909.9	909.9	905.6	909.9	909.9	914.1	914.1	909.9	909.9	897.1
55°	803.6	799.2	803.6	799.2	803.6	803.6	799.2	799.2	795.0	790.8	786.5
57.5°	705.8	705.8	705.8	705.8	701.5	705.8	701.5	697.2	697.2	688.8	676.0
60°	620.8	620.8	620.8	620.8	620.8	616.5	620.8	616.5	608.0	599.5	582.5
62.5°	548.5	544.2	548.5	544.2	544.2	540.0	540.0	535.8	527.2	518.8	501.8
65°	484.8	489.0	484.8	484.8	480.5	476.1	476.1	471.9	459.1	450.6	433.6
67.5°	416.6	412.4	412.4	412.4	408.1	408.1	408.1	399.6	391.1	378.4	361.4
70°	340.1	340.1	340.1	335.9	335.9	331.6	331.6	327.4	318.9	310.4	289.1
72.5°	267.9	267.9	267.9	259.4	263.6	259.4	259.4	250.9	246.6	233.9	221.1
75°	204.1	204.1	199.9	199.9	195.6	191.4	191.4	187.1	182.9	174.4	161.6
77.5°	148.8	148.8	148.8	144.5	140.2	136.0	136.0	131.8	127.5	123.2	114.8
80°	102.0	102.0	102.0	102.0	97.8	93.5	93.5	89.2	89.2	85.0	76.5
82.5°	68.0	68.0	68.0	68.0	63.8	63.8	63.8	59.5	55.2	55.2	46.8
85°	46.8	46.8	42.5	42.5	42.5	42.5	38.2	38.2	34.0	29.8	29.8
87.5°	25.5	25.5	25.5	25.5	21.2	21.2	21.2	21.2	17.0	17.0	12.8
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°	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9
2.5°	3027.1	3027.1	3022.9	3010.1	3014.4	3010.1	3014.4	3010.1	2997.4	3010.1	2997.4
5°	3044.2	3048.5	3040.0	3022.9	3027.1	3022.9	3022.9	3018.6	3005.9	3014.4	3005.9
7.5°	3061.2	3057.0	3052.8	3035.6	3040.0	3035.6	3035.6	3027.1	3014.4	3022.9	3010.1
10°	3069.8	3069.8	3061.2	3044.2	3044.2	3040.0	3044.2	3040.0	3022.9	3035.6	3027.1
12.5°	3069.8	3065.5	3065.5	3044.2	3048.5	3044.2	3048.5	3040.0	3027.1	3035.6	3031.4
15°	3057.0	3057.0	3052.8	3031.4	3035.6	3035.6	3040.0	3031.4	3018.6	3031.4	3022.9
17.5°	3031.4	3031.4	3027.1	3010.1	3018.6	3018.6	3022.9	3014.4	3001.6	3010.1	3010.1
20°	2980.4	2984.6	2984.6	2971.9	2980.4	2980.4	2984.6	2980.4	2976.1	2980.4	2971.9
22.5°	2920.9	2929.4	2929.4	2916.6	2925.1	2925.1	2937.9	2933.6	2925.1	2929.4	2925.1
25°	2831.6	2840.1	2848.6	2840.1	2848.6	2848.6	2861.4	2857.1	2848.6	2857.1	2844.4
27.5°	2729.6	2733.9	2742.4	2733.9	2746.6	2742.4	2755.1	2750.9	2738.1	2750.9	2746.6
30°	2585.0	2602.0	2614.8	2602.0	2614.8	2614.8	2623.2	2619.0	2614.8	2610.5	2610.5
32.5°	2423.5	2440.5	2440.5	2436.2	2444.8	2444.8	2449.0	2440.5	2436.2	2440.5	2444.8
35°	2223.6	2232.1	2240.6	2236.4	2240.6	2244.9	2240.6	2244.9	2232.1	2236.4	2236.4
37.5°	2006.8	2015.2	2015.2	2002.5	2011.0	2011.0	2002.5	2002.5	1994.0	2002.5	1985.5
40°	1777.2	1768.8	1773.0	1764.5	1755.9	1755.9	1751.6	1734.6	1726.1	1730.4	1734.6
42.5°	1551.9	1551.9	1539.1	1517.9	1496.6	1496.6	1483.9	1475.4	1458.4	1466.9	1462.6
45°	1360.5	1339.2	1322.2	1288.2	1275.5	1267.0	1245.8	1224.5	1216.0	1220.2	1216.0
47.5°	1177.8	1160.8	1118.1	1071.4	1058.6	1045.9	1020.4	994.9	986.4	977.9	977.9
50°	1024.6	994.9	948.1	897.1	875.9	854.6	820.6	795.0	778.0	782.2	782.2
52.5°	884.4	850.4	795.0	731.2	705.8	680.2	650.5	620.8	608.0	603.8	603.8
55°	761.0	722.8	667.5	595.2	574.0	544.2	506.0	471.9	454.9	450.6	459.1
57.5°	650.5	616.5	552.8	480.5	454.9	425.1	386.9	357.1	335.9	331.6	335.9
60°	561.2	514.5	459.1	391.1	357.1	331.6	289.1	263.6	242.4	233.9	238.1
62.5°	471.9	429.4	374.1	306.1	280.6	255.1	216.9	187.1	170.1	165.9	170.1
65°	403.9	361.4	310.4	250.9	225.4	199.9	165.9	136.0	123.2	119.0	123.2
67.5°	335.9	297.6	255.1	199.9	178.6	157.2	123.2	102.0	85.0	80.8	85.0
70°	272.1	238.1	195.6	157.2	136.0	119.0	93.5	72.2	59.5	55.2	59.5
72.5°	204.1	178.6	148.8	114.8	102.0	89.2	68.0	51.0	42.5	38.2	42.5
75°	148.8	127.5	106.2	80.8	72.2	63.8	46.8	34.0	29.8	25.5	29.8
77.5°	102.0	89.2	72.2	55.2	46.8	42.5	29.8	25.5	21.2	17.0	17.0
80°	68.0	59.5	46.8	38.2	34.0	29.8	21.2	17.0	12.8	12.8	12.8
82.5°	42.5	34.0	29.8	21.2	17.0	17.0	12.8	8.5	8.5	8.5	8.5
85°	25.5	21.2	17.0	12.8	8.5	8.5	4.2	4.2	4.2	4.2	4.2
87.5°	12.8	8.5	8.5	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°	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9
2.5°	3005.9	2997.4	2997.4	3001.6	3005.9	3010.1	3001.6	2997.4	2997.4	3010.1	3001.6
5°	3005.9	3001.6	3001.6	3001.6	3010.1	3014.4	3005.9	3001.6	3005.9	3018.6	3014.4
7.5°	3018.6	3010.1	3014.4	3014.4	3018.6	3027.1	3018.6	3014.4	3018.6	3031.4	3022.9
10°	3027.1	3018.6	3022.9	3018.6	3031.4	3035.6	3027.1	3022.9	3027.1	3044.2	3040.0
12.5°	3031.4	3027.1	3027.1	3022.9	3035.6	3040.0	3031.4	3027.1	3031.4	3044.2	3040.0
15°	3022.9	3018.6	3018.6	3018.6	3027.1	3035.6	3022.9	3018.6	3018.6	3031.4	3027.1
17.5°	3005.9	2997.4	2997.4	2997.4	3001.6	3005.9	2993.1	2988.9	2984.6	2997.4	2993.1
20°	2976.1	2967.6	2959.1	2959.1	2963.4	2963.4	2954.9	2942.1	2942.1	2946.4	2937.9
22.5°	2920.9	2916.6	2908.1	2903.9	2912.4	2908.1	2891.1	2878.4	2874.1	2878.4	2869.9
25°	2844.4	2835.9	2831.6	2827.4	2831.6	2827.4	2810.4	2793.4	2793.4	2793.4	2780.6
27.5°	2738.1	2729.6	2725.4	2725.4	2729.6	2721.1	2704.0	2687.0	2678.5	2678.5	2665.8
30°	2602.0	2602.0	2597.8	2593.5	2589.2	2589.2	2563.8	2546.8	2538.2	2542.5	2534.0
32.5°	2436.2	2432.0	2427.8	2415.0	2419.2	2415.0	2393.6	2380.9	2368.1	2359.6	2355.4
35°	2223.6	2223.6	2219.4	2219.4	2219.4	2215.1	2193.9	2181.1	2172.6	2168.4	2155.6
37.5°	1989.8	1985.5	1981.2	1981.2	1981.2	1981.2	1968.5	1955.8	1955.8	1951.5	1943.0
40°	1726.1	1730.4	1734.6	1730.4	1743.1	1755.9	1738.9	1730.4	1726.1	1738.9	1721.9
42.5°	1471.1	1466.9	1488.1	1492.4	1492.4	1513.6	1517.9	1522.1	1517.9	1526.4	1526.4
45°	1224.5	1220.2	1241.5	1250.0	1271.2	1296.8	1309.5	1330.8	1339.2	1347.8	1339.2
47.5°	990.6	1007.6	1024.6	1045.9	1062.9	1105.4	1131.0	1152.2	1160.8	1173.5	1173.5
50°	795.0	812.1	841.9	858.9	880.1	931.1	973.6	1003.4	1020.4	1033.1	1028.9
52.5°	612.2	642.0	680.2	697.2	727.0	786.5	833.4	867.4	888.6	901.4	905.6
55°	471.9	497.5	535.8	561.2	591.0	654.8	714.2	752.5	773.8	790.8	799.2
57.5°	348.6	378.4	420.9	442.1	476.1	548.5	599.5	646.2	671.8	693.0	697.2
60°	255.1	284.9	323.1	348.6	382.6	454.9	514.5	557.0	586.8	603.8	612.2
62.5°	182.9	212.6	250.9	276.4	306.1	369.9	429.4	471.9	501.8	523.0	535.8
65°	131.8	161.6	199.9	221.1	246.6	306.1	361.4	403.9	433.6	459.1	467.6
67.5°	97.8	119.0	153.0	174.4	199.9	246.6	293.4	331.6	361.4	382.6	391.1
70°	72.2	89.2	119.0	131.8	148.8	191.4	229.6	263.6	289.1	306.1	314.6
72.5°	51.0	63.8	85.0	97.8	110.5	144.5	174.4	199.9	216.9	233.9	242.4
75°	34.0	42.5	59.5	68.0	76.5	102.0	123.2	144.5	157.2	170.1	174.4
77.5°	21.2	29.8	42.5	46.8	55.2	68.0	85.0	97.8	106.2	114.8	123.2
80°	12.8	17.0	25.5	29.8	34.0	46.8	55.2	63.8	72.2	80.8	85.0
82.5°	8.5	12.8	17.0	17.0	21.2	25.5	34.0	42.5	46.8	51.0	55.2
85°	4.2	4.2	8.5	8.5	12.8	12.8	17.0	21.2	25.5	29.8	34.0
87.5°	4.2	4.2	4.2	4.2	8.5	8.5	12.8	12.8	12.8	17.0	17.0
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: P252713

CATALOG NUMBER: LE_6B50D010R EC6B30508027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9	3005.9
2.5°	2993.1	3005.9	2993.1	3001.6	2997.4	2997.4	2993.1	2997.4
5°	3005.9	3022.9	3005.9	3018.6	3010.1	3010.1	3010.1	3014.4
7.5°	3018.6	3035.6	3022.9	3035.6	3031.4	3027.1	3027.1	3035.6
10°	3031.4	3044.2	3035.6	3048.5	3044.2	3040.0	3040.0	3048.5
12.5°	3031.4	3048.5	3040.0	3052.8	3048.5	3044.2	3044.2	3048.5
15°	3018.6	3040.0	3027.1	3040.0	3035.6	3031.4	3031.4	3040.0
17.5°	2980.4	2997.4	2988.9	2997.4	2997.4	2993.1	2997.4	3001.6
20°	2929.4	2942.1	2933.6	2942.1	2942.1	2933.6	2937.9	2942.1
22.5°	2857.1	2869.9	2861.4	2869.9	2865.6	2861.4	2861.4	2857.1
25°	2767.9	2784.9	2772.1	2780.6	2772.1	2763.6	2763.6	2767.9
27.5°	2657.2	2670.0	2653.0	2661.5	2653.0	2644.5	2644.5	2640.2
30°	2512.8	2517.0	2504.2	2512.8	2504.2	2500.0	2491.5	2491.5
32.5°	2338.4	2342.6	2329.9	2329.9	2321.4	2321.4	2304.4	2317.1
35°	2134.4	2138.6	2134.4	2130.1	2117.4	2113.1	2108.9	2108.9
37.5°	1921.8	1921.8	1909.0	1904.8	1896.2	1887.8	1892.0	1879.2
40°	1704.9	1700.6	1687.9	1692.1	1687.9	1675.1	1670.9	1666.6
42.5°	1500.9	1500.9	1488.1	1492.4	1483.9	1479.6	1466.9	1471.1
45°	1322.2	1322.2	1309.5	1309.5	1305.2	1292.5	1296.8	1288.2
47.5°	1160.8	1160.8	1156.5	1156.5	1143.8	1139.5	1139.5	1139.5
50°	1020.4	1020.4	1020.4	1020.4	1016.1	1011.9	1007.6	1011.9
52.5°	901.4	909.9	905.6	905.6	901.4	897.1	892.9	892.9
55°	795.0	799.2	799.2	803.6	799.2	795.0	799.2	795.0
57.5°	701.5	710.0	710.0	710.0	710.0	710.0	705.8	701.5
60°	620.8	625.0	625.0	629.2	629.2	629.2	625.0	625.0
62.5°	540.0	548.5	552.8	552.8	557.0	552.8	552.8	552.8
65°	476.1	484.8	489.0	484.8	489.0	489.0	484.8	484.8
67.5°	399.6	408.1	408.1	408.1	408.1	412.4	408.1	408.1
70°	323.1	331.6	327.4	331.6	331.6	331.6	331.6	331.6
72.5°	246.6	250.9	255.1	255.1	259.4	255.1	255.1	255.1
75°	178.6	187.1	187.1	187.1	187.1	191.4	191.4	191.4
77.5°	127.5	131.8	131.8	136.0	136.0	136.0	136.0	140.2
80°	89.2	89.2	93.5	93.5	97.8	97.8	97.8	97.8
82.5°	59.5	63.8	63.8	63.8	63.8	63.8	63.8	63.8
85°	34.0	38.2	38.2	38.2	38.2	42.5	42.5	42.5
87.5°	21.2	21.2	21.2	21.2	21.2	21.2	17.0	17.0
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)