

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: P252308

Luminaire Tested: **LE_6B50D010R EC6B30509727 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252308
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B50D010R EC6B30509727 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4411.2 lumens
Efficiency: N/A
Efficacy: 75.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

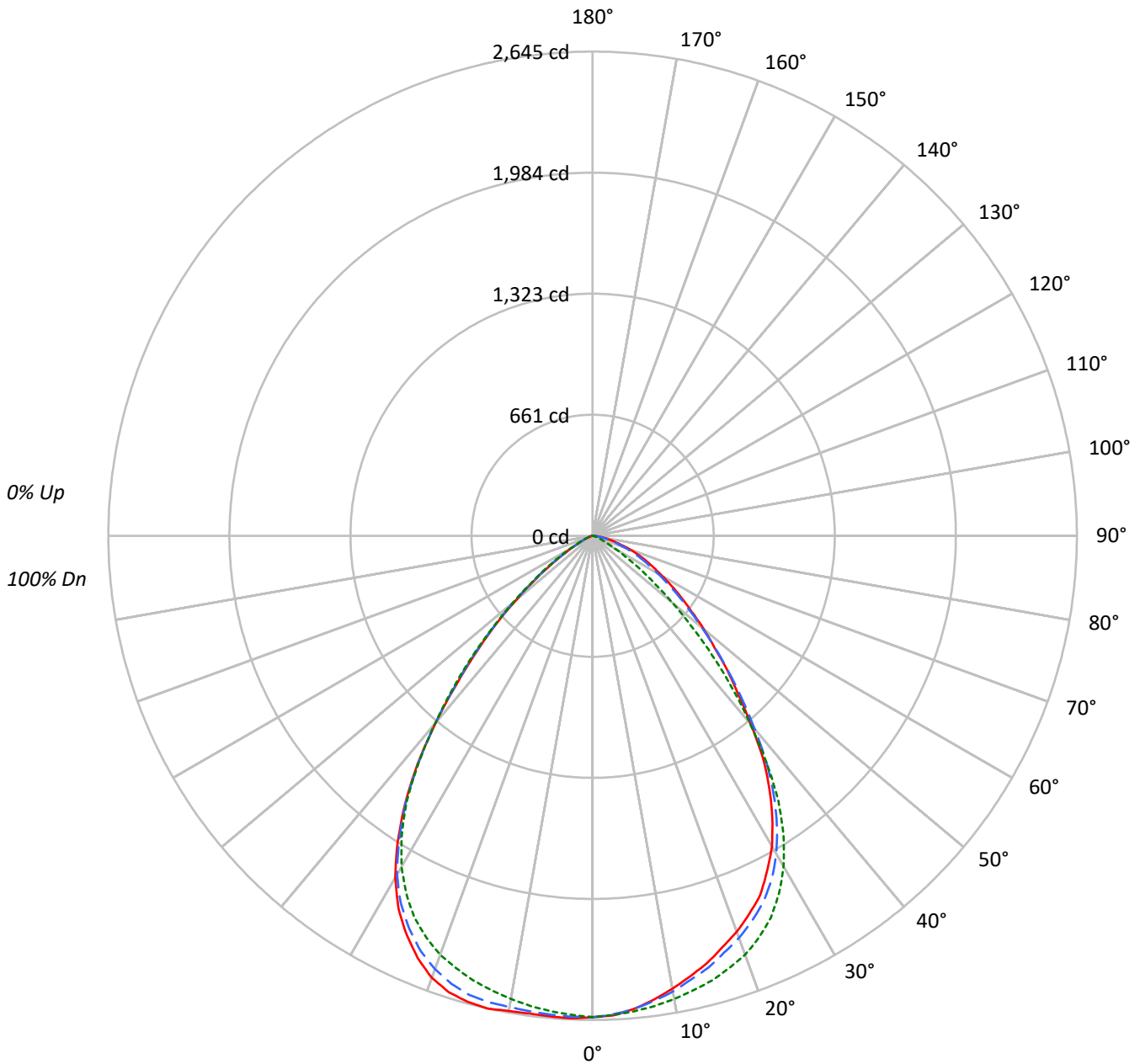
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252308

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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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	171544	171544	171544
5°	169913	170739	172618
10°	166406	170189	174614
15°	163222	169868	178027
20°	159836	169098	178360
25°	155905	165724	173045
30°	147608	157176	162434
35°	134041	140874	142133
40°	114394	113858	113321
45°	96102	85261	82623
50°	80263	57691	54798
55°	67552	35397	32144
60°	57177	18646	16167
65°	49523	9803	7842
70°	41202	6066	4235
75°	30400	4008	2395
80°	23857	2405	1165
85°	19013	2321	0



TEST NUMBER: P252308

CATALOG NUMBER: LE_6B50D010R EC6B30509727 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.8	5.6
10°-20°	709.5	16.1
20°-30°	1047.7	23.8
30°-40°	1079.8	24.5
40°-50°	745.8	16.9
50°-60°	367.6	8.3
60°-70°	149.0	3.4
70°-80°	53.1	1.2
80°-90°	10.9	0.2
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°	2005.1	45.5
0°-40°	3084.9	69.9
0°-60°	4198.3	95.2
0°-90°	4411.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4411.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2629	2629	2629	2629	2629	
5°	2594	2594	2607	2626	2636	245
15°	2417	2442	2515	2598	2636	680
25°	2166	2207	2302	2369	2404	990
35°	1683	1724	1769	1778	1785	1043
45°	1042	1048	924	911	896	805
55°	594	572	311	292	283	537
65°	321	289	64	51	51	319
75°	121	102	16	10	10	135
85°	25	19	3	0	0	31
90°	0	0	0	0	0	



TEST NUMBER: P252308

CATALOG NUMBER: LE_6B50D010R EC6B30509727 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4
2.5°	2623.0	2613.5	2619.9	2607.1	2623.0	2607.1	2610.4	2613.5	2610.4	2613.5	2616.6
5°	2594.5	2584.9	2594.5	2578.6	2594.5	2584.9	2584.9	2588.1	2588.1	2591.2	2594.5
7.5°	2556.4	2546.8	2556.4	2540.5	2559.5	2550.0	2550.0	2556.4	2553.1	2556.4	2562.8
10°	2511.9	2499.1	2508.8	2499.1	2518.2	2505.5	2511.9	2511.9	2511.9	2521.4	2527.8
12.5°	2464.2	2451.5	2464.2	2448.4	2467.4	2457.9	2461.1	2470.6	2473.8	2480.1	2483.2
15°	2416.6	2400.8	2407.1	2397.5	2416.6	2407.1	2410.2	2423.0	2423.0	2432.5	2442.0
17.5°	2356.2	2343.6	2356.2	2343.6	2359.5	2353.1	2359.5	2369.0	2369.0	2378.5	2388.0
20°	2302.2	2289.6	2299.1	2289.6	2308.6	2299.1	2302.2	2315.0	2318.1	2327.8	2337.2
22.5°	2235.6	2226.1	2232.4	2222.9	2242.0	2235.6	2238.8	2251.5	2254.6	2261.0	2276.9
25°	2165.8	2146.8	2156.2	2149.9	2168.9	2159.4	2165.8	2178.5	2184.8	2194.4	2207.0
27.5°	2064.1	2054.6	2061.0	2061.0	2076.9	2067.2	2070.5	2083.1	2092.8	2102.2	2118.1
30°	1959.4	1943.5	1949.8	1953.0	1965.6	1959.4	1965.6	1978.4	1981.5	1994.2	2007.0
32.5°	1826.0	1819.6	1832.2	1826.0	1832.2	1832.2	1835.5	1845.0	1851.4	1857.8	1873.6
35°	1683.0	1670.4	1683.0	1676.8	1692.6	1683.0	1692.6	1702.1	1702.1	1714.8	1724.4
37.5°	1527.5	1511.6	1517.9	1517.9	1524.2	1521.1	1521.1	1537.0	1540.1	1549.6	1559.2
40°	1343.2	1336.9	1349.6	1346.5	1349.6	1349.6	1352.8	1362.4	1368.6	1371.9	1375.0
42.5°	1178.1	1181.4	1184.5	1184.5	1184.5	1184.5	1184.5	1197.2	1194.0	1203.5	1206.8
45°	1041.6	1028.9	1035.2	1032.0	1041.6	1032.0	1041.6	1051.1	1044.8	1054.2	1048.0
47.5°	901.9	901.9	901.9	898.8	905.0	901.9	908.2	911.4	911.4	911.4	908.2
50°	790.8	781.2	784.4	784.4	787.5	784.4	790.8	793.9	793.9	787.5	774.9
52.5°	682.8	679.6	679.6	685.9	685.9	682.8	682.8	682.8	682.8	673.2	666.9
55°	593.9	587.5	590.6	590.6	590.6	590.6	593.9	590.6	590.6	581.1	571.6
57.5°	514.5	508.1	508.1	508.1	511.2	508.1	508.1	508.1	504.9	495.4	482.6
60°	438.2	435.0	438.2	438.2	441.4	438.2	438.2	438.2	431.9	422.4	409.6
62.5°	374.8	374.8	374.8	377.9	377.9	374.8	374.8	371.5	368.4	355.6	343.0
65°	320.8	317.5	320.8	320.8	323.9	323.9	320.8	317.5	314.4	301.6	289.0
67.5°	266.8	263.6	266.8	266.8	269.9	266.8	266.8	266.8	257.2	250.9	238.1
70°	216.0	212.8	212.8	212.8	216.0	209.6	212.8	212.8	206.4	196.9	184.1
72.5°	165.1	165.1	165.1	165.1	165.1	165.1	162.0	162.0	155.6	146.1	139.8
75°	120.6	120.6	123.9	123.9	120.6	120.6	120.6	117.5	114.4	108.0	101.6
77.5°	88.9	88.9	88.9	88.9	85.8	85.8	85.8	82.6	79.4	76.2	69.9
80°	63.5	63.5	63.5	60.4	63.5	60.4	60.4	60.4	54.0	50.8	47.6
82.5°	44.5	41.2	41.2	41.2	41.2	41.2	41.2	38.1	38.1	34.9	31.8
85°	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	22.2	19.0	19.0
87.5°	12.8	15.9	15.9	15.9	15.9	15.9	15.9	12.8	12.8	12.8	9.5
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: P252308

CATALOG NUMBER: LE_6B50D010R EC6B30509727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4
2.5°	2616.6	2616.6	2623.0	2613.5	2629.4	2619.9	2616.6	2632.5	2623.0	2619.9	2626.2
5°	2594.5	2597.6	2600.8	2594.5	2610.4	2600.8	2600.8	2616.6	2610.4	2607.1	2616.6
7.5°	2565.9	2569.0	2575.4	2572.2	2584.9	2578.6	2581.8	2597.6	2591.2	2591.2	2600.8
10°	2530.9	2537.2	2543.6	2543.6	2559.5	2553.1	2553.1	2572.2	2565.9	2569.0	2581.8
12.5°	2489.6	2499.1	2508.8	2511.9	2527.8	2518.2	2521.4	2543.6	2540.5	2543.6	2556.4
15°	2445.2	2457.9	2467.4	2467.4	2486.5	2477.0	2486.5	2508.8	2502.4	2515.0	2530.9
17.5°	2394.4	2407.1	2419.8	2423.0	2442.0	2435.6	2448.4	2470.6	2470.6	2477.0	2496.0
20°	2346.8	2362.6	2369.0	2378.5	2397.5	2394.4	2400.8	2426.1	2426.1	2435.6	2454.8
22.5°	2283.2	2299.1	2311.9	2321.4	2337.2	2337.2	2346.8	2369.0	2369.0	2375.4	2394.4
25°	2213.4	2232.4	2242.0	2251.5	2267.4	2264.1	2273.8	2292.8	2296.0	2302.2	2321.4
27.5°	2124.5	2140.4	2153.0	2159.4	2181.6	2168.9	2178.5	2200.6	2197.5	2203.9	2219.8
30°	2013.4	2029.2	2041.9	2041.9	2061.0	2061.0	2070.5	2080.0	2080.0	2086.4	2099.0
32.5°	1883.1	1902.1	1902.1	1911.8	1924.4	1911.8	1924.4	1937.1	1930.8	1940.2	1949.8
35°	1733.9	1743.4	1746.6	1746.6	1756.1	1752.9	1749.8	1759.2	1752.9	1768.8	1778.4
37.5°	1552.9	1565.5	1559.2	1565.5	1562.4	1552.9	1552.9	1568.8	1556.0	1559.2	1568.8
40°	1378.2	1378.2	1375.0	1359.1	1362.4	1352.8	1349.6	1352.8	1340.1	1336.9	1349.6
42.5°	1197.2	1194.0	1184.5	1162.2	1165.4	1149.5	1136.9	1136.9	1130.5	1127.4	1130.5
45°	1035.2	1025.8	1009.9	984.4	978.1	965.4	940.0	933.6	924.1	924.1	927.2
47.5°	886.0	873.2	847.9	819.2	803.4	787.5	762.1	752.6	736.8	730.4	736.8
50°	762.1	739.9	708.1	666.9	651.0	632.0	606.5	590.6	574.8	568.4	565.2
52.5°	647.9	616.0	584.2	533.5	520.8	501.8	466.8	450.9	435.0	422.4	422.4
55°	549.4	520.8	476.4	428.8	409.6	390.6	355.6	333.4	317.5	311.2	304.9
57.5°	460.5	428.8	387.4	336.6	317.5	298.5	263.6	241.4	225.5	216.0	209.6
60°	387.4	352.5	311.2	266.8	244.5	225.5	190.5	168.2	152.4	142.9	136.5
62.5°	317.5	289.0	247.8	206.4	187.4	168.2	139.8	117.5	101.6	95.2	85.8
65°	266.8	238.1	200.0	165.1	149.2	130.2	104.8	85.8	73.0	63.5	57.1
67.5°	216.0	193.8	162.0	130.2	114.4	101.6	79.4	63.5	50.8	44.5	41.2
70°	171.5	149.2	123.9	98.5	88.9	76.2	60.4	44.5	38.1	31.8	28.6
72.5°	127.0	111.1	92.1	73.0	63.5	57.1	41.2	34.9	25.4	22.2	19.0
75°	92.1	79.4	66.6	50.8	44.5	41.2	31.8	22.2	19.0	15.9	12.8
77.5°	63.5	57.1	44.5	34.9	31.8	28.6	22.2	15.9	12.8	9.5	9.5
80°	41.2	34.9	28.6	22.2	22.2	19.0	12.8	9.5	9.5	6.4	6.4
82.5°	25.4	22.2	19.0	15.9	12.8	12.8	9.5	6.4	6.4	3.1	3.1
85°	15.9	12.8	9.5	9.5	6.4	6.4	6.4	3.1	3.1	3.1	3.1
87.5°	6.4	6.4	6.4	3.1	3.1	3.1	3.1	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: P252308

CATALOG NUMBER: LE_6B50D010R EC6B30509727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4
2.5°	2626.2	2626.2	2632.5	2623.0	2629.4	2629.4	2635.8	2623.0	2629.4	2632.5	2638.9
5°	2613.5	2616.6	2623.0	2619.9	2623.0	2623.0	2629.4	2613.5	2626.2	2626.2	2635.8
7.5°	2600.8	2600.8	2607.1	2604.0	2610.4	2613.5	2619.9	2607.1	2619.9	2619.9	2629.4
10°	2584.9	2584.9	2594.5	2591.2	2600.8	2604.0	2613.5	2600.8	2613.5	2616.6	2626.2
12.5°	2562.8	2565.9	2575.4	2575.4	2584.9	2591.2	2600.8	2594.5	2610.4	2613.5	2626.2
15°	2537.2	2543.6	2556.4	2553.1	2562.8	2572.2	2584.9	2575.4	2597.6	2604.0	2616.6
17.5°	2505.5	2511.9	2521.4	2521.4	2530.9	2537.2	2553.1	2546.8	2565.9	2569.0	2584.9
20°	2457.9	2467.4	2480.1	2477.0	2486.5	2492.9	2505.5	2499.1	2518.2	2524.6	2540.5
22.5°	2400.8	2407.1	2416.6	2416.6	2426.1	2432.5	2445.2	2435.6	2454.8	2457.9	2470.6
25°	2324.5	2330.9	2337.2	2340.4	2349.9	2353.1	2359.5	2353.1	2369.0	2372.1	2388.0
27.5°	2226.1	2229.2	2238.8	2238.8	2245.1	2248.2	2257.9	2245.1	2267.4	2267.4	2276.9
30°	2108.6	2105.4	2118.1	2111.8	2118.1	2118.1	2127.6	2121.2	2137.1	2130.8	2140.4
32.5°	1953.0	1959.4	1959.4	1953.0	1965.6	1962.5	1962.5	1956.1	1965.6	1968.9	1975.2
35°	1772.0	1781.5	1781.5	1784.6	1787.9	1778.4	1781.5	1762.5	1778.4	1781.5	1784.6
37.5°	1575.1	1565.5	1571.9	1562.4	1578.2	1559.2	1559.2	1546.5	1559.2	1559.2	1562.4
40°	1349.6	1346.5	1352.8	1346.5	1343.2	1340.1	1333.8	1324.2	1336.9	1330.6	1340.1
42.5°	1136.9	1133.6	1133.6	1127.4	1124.1	1124.1	1117.8	1111.5	1108.2	1108.2	1124.1
45°	917.8	924.1	917.8	914.6	920.9	914.6	917.8	905.0	911.4	905.0	911.4
47.5°	733.5	736.8	730.4	724.0	733.5	724.0	724.0	714.5	727.2	727.2	720.9
50°	568.4	565.2	558.9	565.2	562.1	562.1	562.1	552.5	558.9	549.4	555.8
52.5°	419.1	416.0	416.0	412.9	416.0	412.9	412.9	409.6	409.6	406.5	409.6
55°	304.9	301.6	295.4	295.4	295.4	298.5	295.4	292.1	292.1	289.0	292.1
57.5°	206.4	200.0	200.0	200.0	200.0	196.9	196.9	193.8	196.9	193.8	196.9
60°	133.4	133.4	127.0	127.0	127.0	127.0	127.0	123.9	127.0	127.0	127.0
62.5°	82.6	82.6	79.4	76.2	79.4	76.2	76.2	76.2	79.4	76.2	79.4
65°	54.0	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
67.5°	38.1	34.9	34.9	34.9	34.9	34.9	34.9	31.8	34.9	34.9	34.9
70°	25.4	25.4	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
72.5°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
75°	12.8	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
77.5°	9.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
80°	6.4	6.4	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	3.1	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	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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: P252308

CATALOG NUMBER: LE_6B50D010R EC6B30509727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4	2629.4
2.5°	2629.4	2632.5	2626.2	2629.4	2623.0	2629.4	2632.5	2638.9
5°	2623.0	2626.2	2619.9	2626.2	2619.9	2626.2	2629.4	2635.8
7.5°	2616.6	2623.0	2616.6	2623.0	2616.6	2623.0	2626.2	2632.5
10°	2616.6	2626.2	2619.9	2629.4	2619.9	2626.2	2632.5	2635.8
12.5°	2616.6	2626.2	2623.0	2629.4	2626.2	2632.5	2638.9	2645.2
15°	2610.4	2619.9	2613.5	2623.0	2619.9	2623.0	2635.8	2635.8
17.5°	2575.4	2584.9	2584.9	2591.2	2591.2	2600.8	2607.1	2613.5
20°	2530.9	2540.5	2537.2	2546.8	2546.8	2556.4	2562.8	2569.0
22.5°	2464.2	2477.0	2473.8	2483.2	2480.1	2486.5	2499.1	2496.0
25°	2378.5	2394.4	2391.2	2397.5	2394.4	2394.4	2400.8	2403.9
27.5°	2273.8	2283.2	2280.1	2286.4	2280.1	2286.4	2292.8	2296.0
30°	2137.1	2143.5	2140.4	2143.5	2140.4	2146.8	2149.9	2156.2
32.5°	1972.0	1981.5	1972.0	1978.4	1975.2	1975.2	1987.9	1981.5
35°	1775.1	1778.4	1781.5	1781.5	1775.1	1778.4	1784.6	1784.6
37.5°	1556.0	1571.9	1552.9	1562.4	1559.2	1559.2	1559.2	1568.8
40°	1327.4	1330.6	1324.2	1324.2	1324.2	1321.0	1333.8	1330.6
42.5°	1111.5	1114.6	1111.5	1101.9	1105.1	1105.1	1114.6	1101.9
45°	901.9	908.2	905.0	905.0	898.8	898.8	901.9	895.5
47.5°	714.5	720.9	711.4	714.5	708.1	714.5	711.4	717.6
50°	543.0	549.4	546.2	549.4	549.4	543.0	552.5	539.9
52.5°	406.5	409.6	406.5	403.2	400.1	400.1	406.5	403.2
55°	289.0	285.8	285.8	285.8	289.0	289.0	285.8	282.6
57.5°	193.8	193.8	190.5	190.5	193.8	187.4	190.5	187.4
60°	123.9	123.9	123.9	123.9	120.6	123.9	123.9	123.9
62.5°	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
65°	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
67.5°	31.8	34.9	34.9	34.9	31.8	31.8	31.8	31.8
70°	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
72.5°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
75°	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
77.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
80°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	3.1	3.1	3.1	3.1	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)