

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: P252526

Luminaire Tested: **LE_6B60D010R EC6B60709035 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B60D010R EC6B60709035 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5490.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

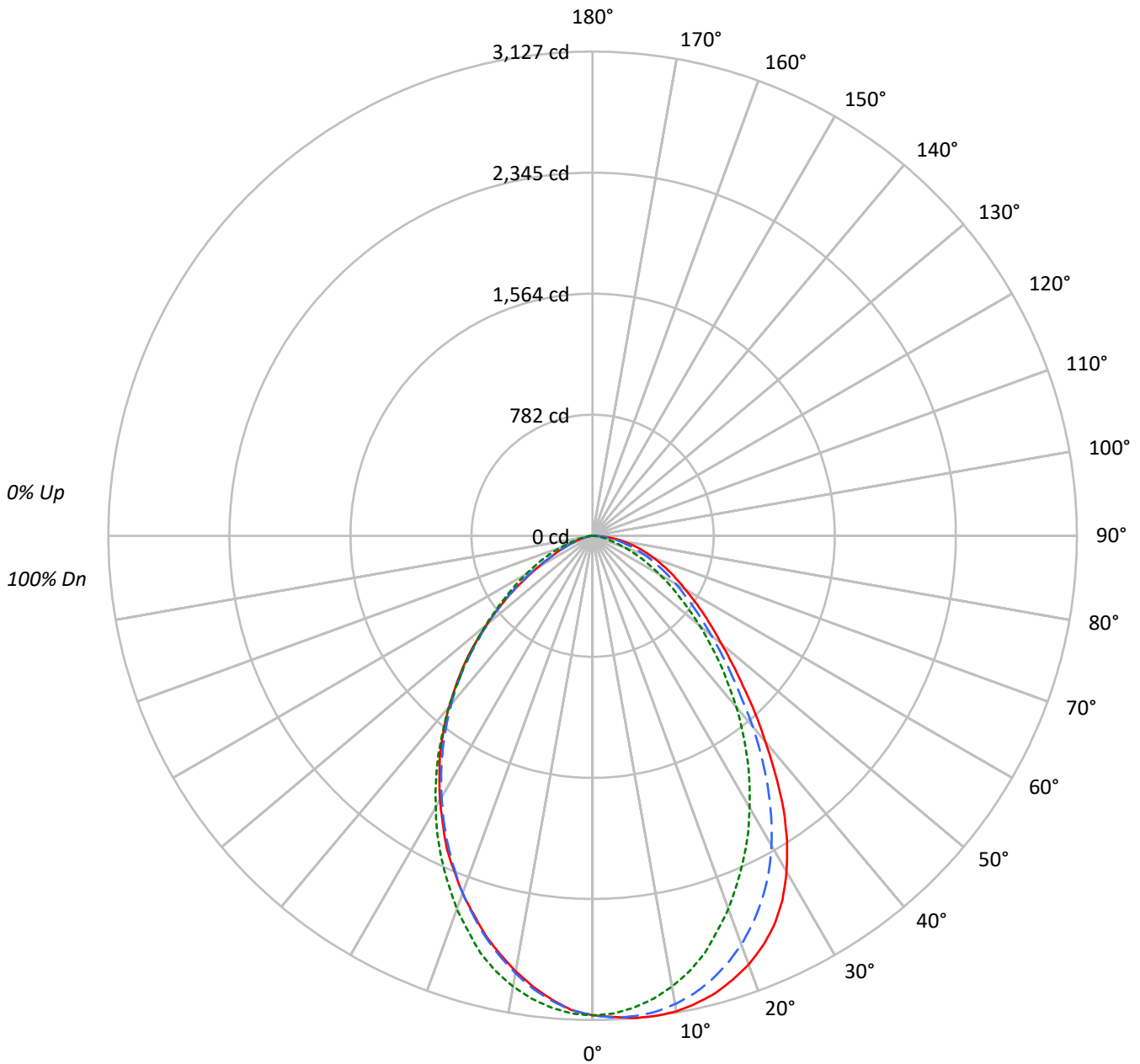
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88																			
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77																			
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67																			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59																			
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53																			
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47																			
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43																			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39																			
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35																			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	202057	202057	202057
5°	204800	200301	196921
10°	206598	195773	189215
15°	206577	188564	180418
20°	204575	177999	170528
25°	199723	165969	160397
30°	188597	152633	148414
35°	170956	138413	136701
40°	147635	123098	122724
45°	126605	107165	107949
50°	110022	91692	90372
55°	98832	77300	72409
60°	89797	65110	53315
65°	84318	53783	39180
70°	80401	41851	28708
75°	76982	30374	19510
80°	72737	21002	12924
85°	64375	12875	6438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.7	5.3
10°-20°	793.5	14.5
20°-30°	1101.6	20.1
30°-40°	1141.0	20.8
40°-50°	937.6	17.1
50°-60°	644.4	11.7
60°-70°	370.4	6.7
70°-80°	170.3	3.1
80°-90°	41.5	0.8
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°	2184.7	39.8
0°-40°	3325.7	60.6
0°-60°	4907.8	89.4
0°-90°	5490.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5490.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3097	3097	3097	3097	3097	
5°	3127	3114	3058	3016	3007	298
15°	3058	2968	2792	2680	2671	861
25°	2774	2590	2306	2207	2228	1270
35°	2146	1970	1738	1686	1716	1331
45°	1372	1269	1162	1148	1170	1069
55°	869	787	680	641	637	782
65°	546	478	348	245	254	544
75°	305	241	120	77	77	323
85°	86	60	17	9	9	96
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°	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1
2.5°	3110.1	3135.9	3118.6	3114.4	3123.0	3123.0	3123.0	3110.1	3118.6	3105.8	3114.4
5°	3127.2	3148.8	3131.6	3123.0	3131.6	3135.9	3123.0	3114.4	3127.2	3110.1	3114.4
7.5°	3127.2	3148.8	3131.6	3127.2	3131.6	3131.6	3127.2	3110.1	3118.6	3101.5	3101.5
10°	3118.6	3135.9	3118.6	3110.1	3114.4	3110.1	3110.1	3088.6	3092.9	3071.4	3071.4
12.5°	3092.9	3114.4	3092.9	3084.2	3084.2	3084.2	3071.4	3054.1	3058.5	3032.6	3028.4
15°	3058.5	3075.6	3054.1	3045.5	3045.5	3041.2	3032.6	3006.9	3006.9	2981.0	2968.1
17.5°	3006.9	3024.0	3006.9	2993.9	2989.6	2981.0	2972.4	2946.6	2938.0	2907.9	2895.0
20°	2946.6	2959.5	2942.4	2929.4	2920.8	2912.2	2895.0	2869.1	2860.6	2830.5	2809.0
22.5°	2869.1	2886.4	2860.6	2847.6	2839.1	2826.1	2809.0	2783.1	2770.2	2731.5	2705.8
25°	2774.5	2783.1	2761.6	2748.8	2731.5	2722.9	2710.0	2675.6	2662.8	2619.8	2589.6
27.5°	2654.1	2662.8	2636.9	2628.2	2606.8	2598.1	2581.0	2550.9	2533.6	2490.6	2460.5
30°	2503.5	2512.1	2495.0	2482.0	2464.9	2447.6	2434.8	2404.6	2378.8	2335.8	2310.0
32.5°	2335.8	2348.8	2331.5	2314.2	2284.1	2288.5	2267.0	2236.9	2215.4	2176.6	2146.5
35°	2146.5	2155.1	2133.6	2129.2	2112.1	2094.9	2073.4	2051.9	2039.0	1996.0	1970.1
37.5°	1935.8	1957.2	1935.8	1918.5	1909.9	1897.0	1884.1	1854.0	1845.4	1819.6	1785.1
40°	1733.5	1746.5	1733.5	1716.4	1703.5	1703.5	1686.2	1669.0	1647.5	1621.8	1608.8
42.5°	1552.9	1544.2	1540.0	1531.4	1514.1	1509.9	1505.6	1484.0	1471.1	1445.4	1423.9
45°	1372.2	1376.5	1367.9	1363.6	1350.8	1342.1	1333.5	1316.2	1312.0	1286.1	1269.0
47.5°	1221.6	1217.4	1208.8	1208.8	1200.1	1191.5	1183.0	1170.0	1165.8	1144.2	1127.0
50°	1084.0	1088.2	1084.0	1079.8	1066.8	1062.5	1053.9	1045.2	1036.8	1015.1	998.0
52.5°	972.1	967.9	963.6	963.6	950.6	946.4	937.8	929.1	920.5	899.0	886.1
55°	868.9	868.9	864.6	860.4	847.4	843.1	838.9	830.2	817.2	800.1	787.2
57.5°	774.2	774.2	770.0	765.8	757.1	757.1	748.5	739.9	731.2	714.1	696.9
60°	688.2	692.5	688.2	684.0	675.4	675.4	671.0	658.1	653.9	632.4	619.4
62.5°	615.1	615.1	615.1	610.9	606.5	597.9	597.9	585.0	576.4	563.5	546.2
65°	546.2	546.2	546.2	542.0	533.4	529.1	524.8	516.2	507.6	494.6	477.5
67.5°	481.8	481.8	481.8	477.5	468.9	464.6	460.2	456.0	443.1	430.1	413.0
70°	421.5	421.5	417.2	413.0	408.6	404.4	400.0	391.5	382.9	365.6	352.8
72.5°	361.4	361.4	361.4	352.8	348.4	348.4	339.9	335.5	326.9	309.8	296.8
75°	305.4	301.1	301.1	296.8	292.5	288.2	283.9	279.6	266.8	258.1	240.9
77.5°	249.5	249.5	245.2	240.9	240.9	236.6	232.2	223.6	219.4	206.5	193.6
80°	193.6	193.6	193.6	193.6	189.2	185.0	185.0	176.4	172.1	159.1	150.5
82.5°	146.2	142.0	142.0	142.0	137.6	133.4	133.4	129.0	124.8	116.1	107.5
85°	86.0	81.8	81.8	81.8	77.4	77.4	73.1	73.1	68.9	60.2	60.2
87.5°	25.8	25.8	30.1	30.1	25.8	25.8	25.8	25.8	25.8	21.5	21.5
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°	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1
2.5°	3105.8	3118.6	3101.5	3097.1	3114.4	3105.8	3101.5	3092.9	3097.1	3088.6	3075.6
5°	3101.5	3118.6	3097.1	3084.2	3105.8	3092.9	3084.2	3075.6	3075.6	3058.5	3049.9
7.5°	3088.6	3097.1	3075.6	3062.8	3075.6	3062.8	3054.1	3041.2	3037.0	3015.5	3002.5
10°	3054.1	3062.8	3037.0	3019.8	3032.6	3015.5	3002.5	2989.6	2981.0	2955.2	2938.0
12.5°	3006.9	3011.1	2981.0	2959.5	2968.1	2955.2	2933.8	2916.5	2907.9	2882.1	2860.6
15°	2942.4	2946.6	2912.2	2882.1	2890.8	2873.5	2847.6	2830.5	2817.6	2791.8	2761.6
17.5°	2864.9	2860.6	2821.9	2791.8	2796.0	2774.5	2748.8	2722.9	2705.8	2675.6	2654.1
20°	2778.9	2766.0	2722.9	2688.5	2692.9	2667.0	2636.9	2611.1	2589.6	2563.8	2533.6
22.5°	2671.2	2654.1	2615.4	2572.4	2576.6	2555.1	2512.1	2490.6	2469.1	2434.8	2408.9
25°	2555.1	2529.4	2490.6	2447.6	2447.6	2421.9	2387.4	2361.6	2340.1	2305.6	2275.5
27.5°	2417.5	2404.6	2353.0	2318.6	2314.2	2288.5	2258.4	2228.2	2202.4	2172.4	2142.2
30°	2267.0	2245.5	2206.8	2168.0	2159.4	2137.9	2107.8	2073.4	2056.1	2026.1	2000.2
32.5°	2107.8	2086.2	2043.2	2004.5	2000.2	1983.0	1957.2	1922.9	1905.6	1884.1	1866.9
35°	1927.1	1918.5	1875.5	1845.4	1845.4	1828.2	1802.4	1772.2	1759.4	1737.9	1716.4
37.5°	1755.1	1742.1	1703.5	1677.6	1677.6	1656.1	1630.4	1617.4	1604.5	1587.2	1574.4
40°	1574.4	1565.8	1535.6	1509.9	1514.1	1497.0	1479.8	1462.5	1454.0	1445.4	1432.5
42.5°	1406.6	1398.0	1376.5	1355.0	1355.0	1342.1	1324.9	1312.0	1303.4	1290.5	1286.1
45°	1256.1	1243.1	1226.0	1204.5	1204.5	1191.5	1183.0	1174.4	1170.0	1161.5	1148.5
47.5°	1109.9	1101.2	1084.0	1062.5	1062.5	1062.5	1045.2	1032.4	1032.4	1023.8	1019.5
50°	985.1	972.1	959.2	942.0	942.0	933.5	920.5	907.6	907.6	903.4	894.8
52.5°	868.9	860.4	843.1	825.9	825.9	817.2	804.4	800.1	795.8	782.9	778.6
55°	770.0	761.4	748.5	727.0	722.6	718.4	705.5	696.9	692.5	679.6	679.6
57.5°	679.6	671.0	649.5	636.6	632.4	623.8	610.9	602.2	597.9	589.4	580.8
60°	602.2	589.4	572.1	554.9	550.6	542.0	529.1	520.5	516.2	499.0	490.4
62.5°	529.1	516.2	499.0	481.8	477.5	468.9	451.6	443.1	434.5	417.2	408.6
65°	460.2	447.4	430.1	413.0	404.4	400.0	382.9	370.0	361.4	348.4	331.2
67.5°	395.8	382.9	365.6	344.1	344.1	331.2	318.4	305.4	292.5	279.6	266.8
70°	335.5	322.6	305.4	288.2	283.9	275.2	262.4	245.2	236.6	219.4	206.5
72.5°	279.6	266.8	249.5	232.2	228.0	219.4	206.5	189.2	176.4	163.5	150.5
75°	228.0	215.1	197.9	185.0	180.6	172.1	159.1	142.0	129.0	120.5	107.5
77.5°	180.6	167.8	154.9	142.0	137.6	129.0	116.1	107.5	94.6	86.0	73.1
80°	137.6	129.0	116.1	107.5	103.2	94.6	86.0	73.1	64.5	55.9	51.6
82.5°	98.9	90.4	81.8	68.9	68.9	60.2	55.9	47.4	38.8	34.4	30.1
85°	55.9	47.4	43.0	38.8	34.4	34.4	30.1	25.8	21.5	17.2	17.2
87.5°	17.2	17.2	12.9	12.9	12.9	12.9	8.6	8.6	8.6	8.6	8.6
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°	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1
2.5°	3075.6	3080.0	3071.4	3080.0	3071.4	3075.6	3067.0	3075.6	3067.0	3075.6	3058.5
5°	3045.5	3045.5	3032.6	3041.2	3032.6	3037.0	3019.8	3024.0	3015.5	3024.0	3006.9
7.5°	2993.9	2998.2	2976.8	2985.4	2972.4	2972.4	2959.5	2963.9	2950.9	2955.2	2942.4
10°	2933.8	2929.4	2907.9	2916.5	2899.2	2899.2	2886.4	2886.4	2869.1	2873.5	2856.2
12.5°	2847.6	2843.4	2817.6	2826.1	2809.0	2809.0	2796.0	2796.0	2778.9	2787.5	2770.2
15°	2748.8	2744.5	2718.6	2722.9	2705.8	2705.8	2688.5	2692.9	2679.9	2688.5	2671.2
17.5°	2636.9	2632.6	2606.8	2611.1	2589.6	2593.9	2581.0	2576.6	2568.1	2572.4	2559.5
20°	2520.8	2512.1	2486.4	2490.6	2482.0	2469.1	2460.5	2464.9	2456.2	2464.9	2451.9
22.5°	2400.2	2383.1	2361.6	2361.6	2353.0	2353.0	2340.1	2348.8	2331.5	2344.4	2335.8
25°	2262.6	2249.8	2232.5	2241.1	2224.0	2224.0	2211.0	2215.4	2206.8	2215.4	2206.8
27.5°	2129.2	2120.8	2094.9	2103.5	2090.6	2094.9	2082.0	2086.2	2082.0	2090.6	2082.0
30°	1987.4	1983.0	1965.9	1965.9	1961.5	1957.2	1953.0	1953.0	1948.6	1961.5	1953.0
32.5°	1854.0	1841.1	1823.9	1836.8	1815.2	1828.2	1819.6	1828.2	1819.6	1828.2	1823.9
35°	1716.4	1712.0	1690.5	1694.9	1690.5	1690.5	1686.2	1686.2	1686.2	1699.1	1699.1
37.5°	1570.1	1565.8	1552.9	1557.2	1548.6	1544.2	1544.2	1552.9	1552.9	1561.5	1561.5
40°	1428.1	1432.5	1419.5	1419.5	1415.2	1415.2	1415.2	1423.9	1419.5	1428.1	1423.9
42.5°	1286.1	1286.1	1273.2	1277.6	1273.2	1277.6	1277.6	1286.1	1286.1	1290.5	1286.1
45°	1152.9	1152.9	1148.5	1152.9	1144.2	1148.5	1144.2	1152.9	1148.5	1152.9	1152.9
47.5°	1019.5	1019.5	1019.5	1015.1	1015.1	1015.1	1015.1	1015.1	1010.9	1019.5	1015.1
50°	894.8	899.0	894.8	894.8	890.4	894.8	890.4	890.4	881.9	886.1	886.1
52.5°	782.9	782.9	774.2	774.2	774.2	770.0	770.0	770.0	765.8	765.8	757.1
55°	675.4	675.4	666.8	666.8	662.5	658.1	653.9	653.9	641.0	641.0	628.0
57.5°	576.4	572.1	559.2	559.2	550.6	546.2	542.0	537.8	529.1	520.5	516.2
60°	486.1	477.5	468.9	464.6	456.0	447.4	438.8	430.1	421.5	417.2	413.0
62.5°	400.0	387.1	378.5	374.2	365.6	352.8	344.1	335.5	326.9	322.6	314.0
65°	322.6	309.8	296.8	292.5	283.9	275.2	262.4	253.8	245.2	240.9	240.9
67.5°	253.8	240.9	223.6	223.6	215.1	206.5	197.9	189.2	185.0	189.2	189.2
70°	189.2	180.6	167.8	163.5	154.9	146.2	142.0	142.0	142.0	146.2	142.0
72.5°	142.0	129.0	120.5	116.1	111.9	107.5	107.5	107.5	103.2	107.5	107.5
75°	98.9	90.4	81.8	81.8	77.4	77.4	77.4	77.4	77.4	77.4	77.4
77.5°	68.9	60.2	55.9	55.9	55.9	51.6	51.6	51.6	51.6	51.6	51.6
80°	43.0	43.0	38.8	38.8	34.4	34.4	34.4	34.4	34.4	34.4	34.4
82.5°	25.8	25.8	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
85°	12.9	12.9	12.9	12.9	12.9	8.6	8.6	8.6	8.6	8.6	8.6
87.5°	4.2	4.2	4.2	4.2	4.2	8.6	8.6	8.6	8.6	8.6	8.6
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: P252526

CATALOG NUMBER: LE_6B60D010R EC6B60709035 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1	3097.1
2.5°	3058.5	3071.4	3054.1	3067.0	3062.8	3058.5	3049.9	3067.0
5°	3006.9	3011.1	2993.9	3011.1	3006.9	2998.2	2989.6	3006.9
7.5°	2933.8	2946.6	2925.1	2942.4	2938.0	2929.4	2920.8	2938.0
10°	2852.0	2864.9	2847.6	2860.6	2860.6	2852.0	2839.1	2856.2
12.5°	2761.6	2770.2	2753.0	2770.2	2766.0	2757.4	2753.0	2766.0
15°	2662.8	2675.6	2658.4	2671.2	2667.0	2662.8	2658.4	2671.2
17.5°	2555.1	2568.1	2555.1	2568.1	2568.1	2555.1	2550.9	2559.5
20°	2447.6	2456.2	2443.4	2456.2	2451.9	2451.9	2443.4	2456.2
22.5°	2327.1	2340.1	2331.5	2340.1	2335.8	2335.8	2331.5	2340.1
25°	2206.8	2219.6	2206.8	2219.6	2215.4	2215.4	2206.8	2228.2
27.5°	2086.2	2094.9	2082.0	2099.2	2094.9	2086.2	2090.6	2094.9
30°	1957.2	1965.9	1957.2	1970.1	1970.1	1970.1	1961.5	1970.1
32.5°	1828.2	1841.1	1828.2	1841.1	1836.8	1836.8	1832.5	1841.1
35°	1699.1	1703.5	1694.9	1707.8	1707.8	1712.0	1703.5	1716.4
37.5°	1565.8	1570.1	1565.8	1570.1	1578.8	1565.8	1574.4	1578.8
40°	1428.1	1436.8	1432.5	1436.8	1436.8	1441.0	1436.8	1441.0
42.5°	1290.5	1299.1	1290.5	1303.4	1299.1	1299.1	1303.4	1303.4
45°	1148.5	1161.5	1152.9	1161.5	1165.8	1161.5	1161.5	1170.0
47.5°	1015.1	1023.8	1019.5	1023.8	1023.8	1023.8	1023.8	1032.4
50°	881.9	886.1	886.1	890.4	890.4	894.8	886.1	890.4
52.5°	748.5	757.1	757.1	757.1	752.8	757.1	757.1	757.1
55°	628.0	632.4	623.8	632.4	632.4	628.0	628.0	636.6
57.5°	511.9	511.9	511.9	511.9	511.9	507.6	511.9	511.9
60°	404.4	408.6	404.4	404.4	404.4	404.4	400.0	408.6
62.5°	314.0	314.0	309.8	314.0	314.0	314.0	318.4	318.4
65°	245.2	249.5	245.2	249.5	249.5	249.5	249.5	253.8
67.5°	193.6	193.6	193.6	193.6	193.6	193.6	193.6	193.6
70°	146.2	146.2	146.2	150.5	146.2	146.2	146.2	150.5
72.5°	107.5	107.5	107.5	107.5	107.5	107.5	111.9	111.9
75°	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
77.5°	51.6	51.6	51.6	55.9	51.6	55.9	51.6	51.6
80°	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
82.5°	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
85°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
87.5°	8.6	8.6	8.6	8.6	4.2	4.2	4.2	4.2
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)