

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: P252496

Luminaire Tested: **LE_6B40D010 EC6B30508050 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252496
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_6B40D010 EC6B30508050 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4590.0 lumens
Efficiency: N/A
Efficacy: 106.7 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

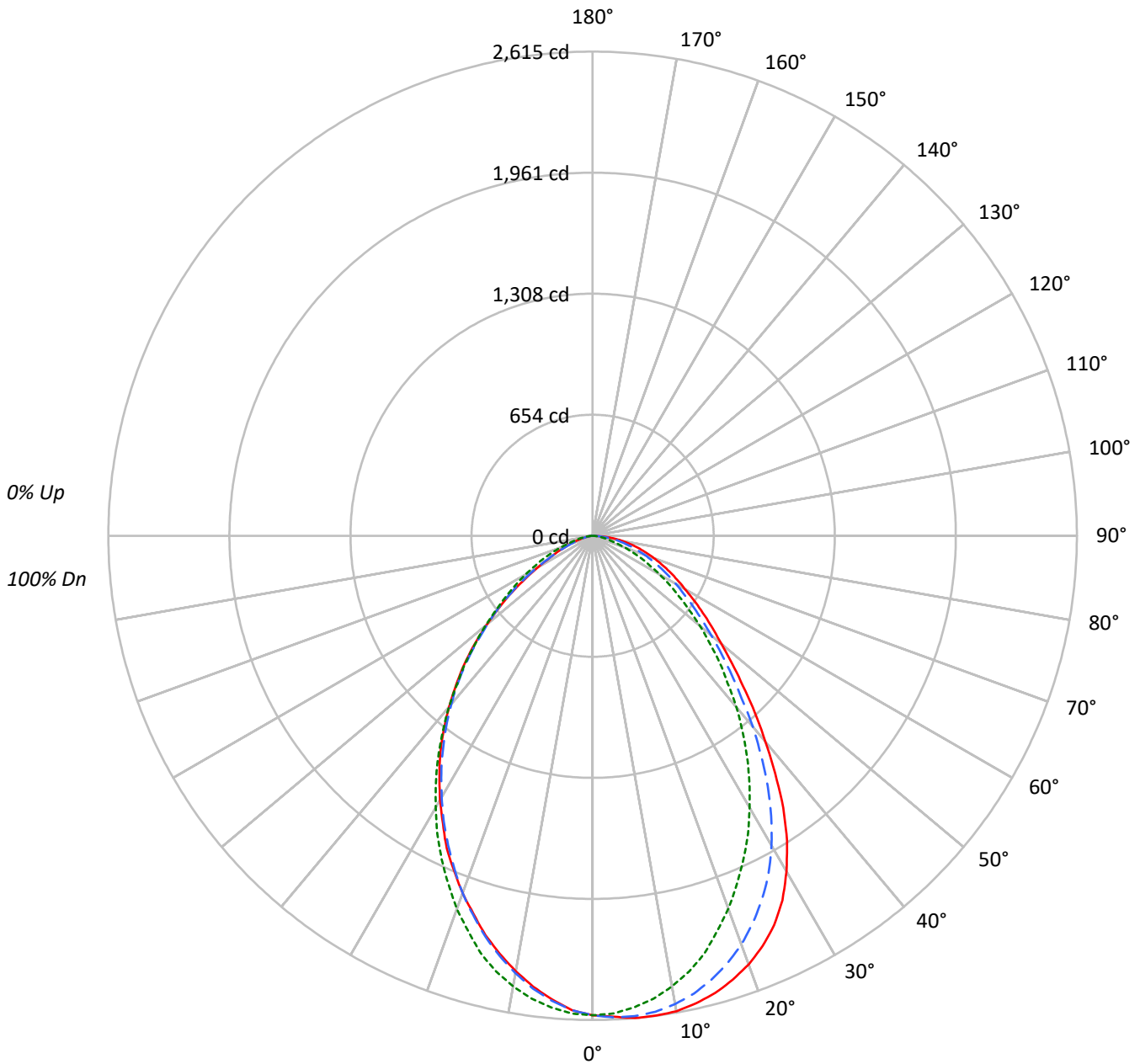
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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			100
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88			88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67			67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47			47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43			43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39			39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35			35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33			33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	168941	168941	168941
5°	171230	167464	164635
10°	172733	163683	158198
15°	172712	157650	150848
20°	171042	148818	142577
25°	166991	138773	134108
30°	157680	127607	124082
35°	142929	115723	114289
40°	123439	102914	102608
45°	105845	89589	90253
50°	91976	76650	75564
55°	82635	64629	60534
60°	75079	54424	44572
65°	70517	44953	32758
70°	67240	34984	24016
75°	64379	25409	16334
80°	60827	17583	10820
85°	53821	10779	5390



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.2	5.3
10°-20°	663.4	14.5
20°-30°	921.0	20.1
30°-40°	954.0	20.8
40°-50°	783.9	17.1
50°-60°	538.8	11.7
60°-70°	309.7	6.7
70°-80°	142.4	3.1
80°-90°	34.7	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°	1826.6	39.8
0°-40°	2780.5	60.6
0°-60°	4103.2	89.4
0°-90°	4590.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4590.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2590	2590	2590	2590	2590	
5°	2615	2604	2557	2521	2514	249
15°	2557	2482	2334	2241	2233	720
25°	2320	2165	1928	1845	1863	1061
35°	1795	1647	1453	1410	1435	1113
45°	1147	1061	971	960	978	893
55°	726	658	568	536	532	654
65°	457	399	291	205	212	455
75°	255	201	101	65	65	270
85°	72	50	14	7	7	81
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°	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2600.2	2621.8	2607.4	2603.9	2611.0	2611.0	2611.0	2600.2	2607.4	2596.6	2603.9
5°	2614.6	2632.6	2618.2	2611.0	2618.2	2621.8	2611.0	2603.9	2614.6	2600.2	2603.9
7.5°	2614.6	2632.6	2618.2	2614.6	2618.2	2618.2	2614.6	2600.2	2607.4	2593.0	2593.0
10°	2607.4	2621.8	2607.4	2600.2	2603.9	2600.2	2600.2	2582.2	2585.9	2567.9	2567.9
12.5°	2585.9	2603.9	2585.9	2578.6	2578.6	2578.6	2567.9	2553.5	2557.1	2535.5	2531.9
15°	2557.1	2571.5	2553.5	2546.2	2546.2	2542.6	2535.5	2513.9	2513.9	2492.4	2481.5
17.5°	2513.9	2528.2	2513.9	2503.1	2499.5	2492.4	2485.1	2463.6	2456.4	2431.2	2420.4
20°	2463.6	2474.4	2460.0	2449.1	2442.0	2434.8	2420.4	2398.9	2391.6	2366.5	2348.5
22.5°	2398.9	2413.2	2391.6	2380.9	2373.6	2362.9	2348.5	2326.9	2316.1	2283.8	2262.1
25°	2319.8	2326.9	2308.9	2298.1	2283.8	2276.5	2265.8	2237.0	2226.2	2190.2	2165.0
27.5°	2219.0	2226.2	2204.6	2197.4	2179.5	2172.2	2157.9	2132.8	2118.2	2082.4	2057.1
30°	2093.1	2100.4	2085.9	2075.1	2060.8	2046.4	2035.6	2010.4	1988.9	1952.9	1931.2
32.5°	1952.9	1963.6	1949.2	1934.9	1909.8	1913.2	1895.4	1870.1	1852.1	1819.8	1794.6
35°	1794.6	1801.9	1783.9	1780.2	1765.9	1751.5	1733.5	1715.5	1704.8	1668.8	1647.1
37.5°	1618.4	1636.4	1618.4	1604.0	1596.9	1586.0	1575.2	1550.1	1542.9	1521.2	1492.5
40°	1449.4	1460.1	1449.4	1435.0	1424.2	1424.2	1409.8	1395.4	1377.5	1355.9	1345.1
42.5°	1298.4	1291.1	1287.5	1280.4	1266.0	1262.4	1258.8	1240.8	1230.0	1208.4	1190.4
45°	1147.2	1150.9	1143.6	1140.1	1129.2	1122.1	1114.9	1100.5	1096.9	1075.4	1061.0
47.5°	1021.4	1017.8	1010.6	1010.6	1003.4	996.2	989.0	978.2	974.6	956.6	942.2
50°	906.2	909.9	906.2	902.8	891.9	888.4	881.1	873.9	866.8	848.8	834.4
52.5°	812.8	809.2	805.6	805.6	794.9	791.2	784.0	776.9	769.6	751.6	740.9
55°	726.5	726.5	722.9	719.2	708.5	704.9	701.2	694.1	683.4	669.0	658.1
57.5°	647.4	647.4	643.8	640.1	633.0	633.0	625.8	618.6	611.4	597.0	582.6
60°	575.4	579.0	575.4	571.9	564.6	564.6	561.0	550.2	546.6	528.6	517.9
62.5°	514.2	514.2	514.2	510.8	507.1	499.9	499.9	489.1	481.9	471.1	456.8
65°	456.8	456.8	456.8	453.1	446.0	442.4	438.8	431.6	424.4	413.6	399.2
67.5°	402.8	402.8	402.8	399.2	392.0	388.4	384.9	381.2	370.4	359.6	345.2
70°	352.5	352.5	348.9	345.2	341.6	338.1	334.5	327.2	320.1	305.8	294.9
72.5°	302.1	302.1	302.1	294.9	291.2	291.2	284.1	280.5	273.4	259.0	248.1
75°	255.4	251.8	251.8	248.1	244.5	241.0	237.4	233.8	223.0	215.8	201.4
77.5°	208.6	208.6	205.0	201.4	201.4	197.8	194.2	187.0	183.4	172.6	161.9
80°	161.9	161.9	161.9	161.9	158.2	154.6	154.6	147.5	143.9	133.1	125.9
82.5°	122.2	118.6	118.6	118.6	115.1	111.5	111.5	107.9	104.2	97.1	89.9
85°	71.9	68.4	68.4	68.4	64.8	64.8	61.1	61.1	57.5	50.4	50.4
87.5°	21.6	21.6	25.1	25.1	21.6	21.6	21.6	21.6	21.6	18.0	18.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2596.6	2607.4	2593.0	2589.5	2603.9	2596.6	2593.0	2585.9	2589.5	2582.2	2571.5
5°	2593.0	2607.4	2589.5	2578.6	2596.6	2585.9	2578.6	2571.5	2571.5	2557.1	2549.9
7.5°	2582.2	2589.5	2571.5	2560.6	2571.5	2560.6	2553.5	2542.6	2539.1	2521.1	2510.4
10°	2553.5	2560.6	2539.1	2524.8	2535.5	2521.1	2510.4	2499.5	2492.4	2470.8	2456.4
12.5°	2513.9	2517.5	2492.4	2474.4	2481.5	2470.8	2452.8	2438.4	2431.2	2409.6	2391.6
15°	2460.0	2463.6	2434.8	2409.6	2416.8	2402.4	2380.9	2366.5	2355.6	2334.1	2308.9
17.5°	2395.2	2391.6	2359.2	2334.1	2337.8	2319.8	2298.1	2276.5	2262.1	2237.0	2219.0
20°	2323.2	2312.5	2276.5	2247.8	2251.4	2229.8	2204.6	2183.0	2165.0	2143.5	2118.2
22.5°	2233.4	2219.0	2186.6	2150.6	2154.2	2136.2	2100.4	2082.4	2064.4	2035.6	2014.0
25°	2136.2	2114.8	2082.4	2046.4	2046.4	2024.8	1996.0	1974.5	1956.5	1927.8	1902.5
27.5°	2021.2	2010.4	1967.2	1938.5	1934.9	1913.2	1888.1	1863.0	1841.4	1816.2	1791.0
30°	1895.4	1877.4	1845.0	1812.6	1805.4	1787.4	1762.2	1733.5	1719.1	1693.9	1672.4
32.5°	1762.2	1744.2	1708.2	1676.0	1672.4	1658.0	1636.4	1607.6	1593.2	1575.2	1560.9
35°	1611.2	1604.0	1568.0	1542.9	1542.9	1528.5	1506.9	1481.8	1471.0	1453.0	1435.0
37.5°	1467.4	1456.5	1424.2	1402.6	1402.6	1384.6	1363.0	1352.2	1341.5	1327.1	1316.2
40°	1316.2	1309.1	1283.9	1262.4	1266.0	1251.5	1237.1	1222.8	1215.6	1208.4	1197.6
42.5°	1176.0	1168.9	1150.9	1132.9	1132.9	1122.1	1107.8	1096.9	1089.8	1078.9	1075.4
45°	1050.1	1039.4	1025.0	1007.0	1007.0	996.2	989.0	981.9	978.2	971.0	960.2
47.5°	927.9	920.8	906.2	888.4	888.4	888.4	873.9	863.1	863.1	856.0	852.4
50°	823.6	812.8	802.0	787.6	787.6	780.4	769.6	758.9	758.9	755.2	748.0
52.5°	726.5	719.2	704.9	690.5	690.5	683.4	672.5	669.0	665.4	654.5	651.0
55°	643.8	636.6	625.8	607.8	604.2	600.6	589.9	582.6	579.0	568.2	568.2
57.5°	568.2	561.0	543.1	532.2	528.6	521.5	510.8	503.5	499.9	492.8	485.5
60°	503.5	492.8	478.4	464.0	460.4	453.1	442.4	435.1	431.6	417.1	410.0
62.5°	442.4	431.6	417.1	402.8	399.2	392.0	377.6	370.4	363.2	348.9	341.6
65°	384.9	374.0	359.6	345.2	338.1	334.5	320.1	309.2	302.1	291.2	276.9
67.5°	330.9	320.1	305.8	287.8	287.8	276.9	266.1	255.4	244.5	233.8	223.0
70°	280.5	269.8	255.4	241.0	237.4	230.1	219.4	205.0	197.8	183.4	172.6
72.5°	233.8	223.0	208.6	194.2	190.6	183.4	172.6	158.2	147.5	136.6	125.9
75°	190.6	179.9	165.4	154.6	151.0	143.9	133.1	118.6	107.9	100.8	89.9
77.5°	151.0	140.2	129.5	118.6	115.1	107.9	97.1	89.9	79.1	71.9	61.1
80°	115.1	107.9	97.1	89.9	86.4	79.1	71.9	61.1	54.0	46.8	43.1
82.5°	82.8	75.5	68.4	57.5	57.5	50.4	46.8	39.5	32.4	28.8	25.1
85°	46.8	39.5	36.0	32.4	28.8	28.8	25.1	21.6	18.0	14.4	14.4
87.5°	14.4	14.4	10.8	10.8	10.8	10.8	7.2	7.2	7.2	7.2	7.2
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°	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2571.5	2575.0	2567.9	2575.0	2567.9	2571.5	2564.2	2571.5	2564.2	2571.5	2557.1
5°	2546.2	2546.2	2535.5	2542.6	2535.5	2539.1	2524.8	2528.2	2521.1	2528.2	2513.9
7.5°	2503.1	2506.8	2488.8	2495.9	2485.1	2485.1	2474.4	2478.0	2467.1	2470.8	2460.0
10°	2452.8	2449.1	2431.2	2438.4	2424.0	2424.0	2413.2	2413.2	2398.9	2402.4	2388.0
12.5°	2380.9	2377.2	2355.6	2362.9	2348.5	2348.5	2337.8	2337.8	2323.2	2330.5	2316.1
15°	2298.1	2294.5	2273.0	2276.5	2262.1	2262.1	2247.8	2251.4	2240.6	2247.8	2233.4
17.5°	2204.6	2201.0	2179.5	2183.0	2165.0	2168.6	2157.9	2154.2	2147.1	2150.6	2139.9
20°	2107.5	2100.4	2078.8	2082.4	2075.1	2064.4	2057.1	2060.8	2053.6	2060.8	2050.0
22.5°	2006.9	1992.4	1974.5	1974.5	1967.2	1967.2	1956.5	1963.6	1949.2	1960.0	1952.9
25°	1891.8	1881.0	1866.5	1873.8	1859.4	1859.4	1848.6	1852.1	1845.0	1852.1	1845.0
27.5°	1780.2	1773.0	1751.5	1758.6	1747.9	1751.5	1740.6	1744.2	1740.6	1747.9	1740.6
30°	1661.5	1658.0	1643.6	1643.6	1640.0	1636.4	1632.8	1632.8	1629.2	1640.0	1632.8
32.5°	1550.1	1539.2	1524.9	1535.6	1517.8	1528.5	1521.2	1528.5	1521.2	1528.5	1524.9
35°	1435.0	1431.4	1413.4	1417.0	1413.4	1413.4	1409.8	1409.8	1409.8	1420.6	1420.6
37.5°	1312.8	1309.1	1298.4	1301.9	1294.8	1291.1	1291.1	1298.4	1298.4	1305.5	1305.5
40°	1194.0	1197.6	1186.9	1186.9	1183.2	1183.2	1183.2	1190.4	1186.9	1194.0	1190.4
42.5°	1075.4	1075.4	1064.5	1068.1	1064.5	1068.1	1068.1	1075.4	1075.4	1078.9	1075.4
45°	963.9	963.9	960.2	963.9	956.6	960.2	956.6	963.9	960.2	963.9	963.9
47.5°	852.4	852.4	852.4	848.8	848.8	848.8	848.8	848.8	845.1	852.4	848.8
50°	748.0	751.6	748.0	748.0	744.5	748.0	744.5	744.5	737.2	740.9	740.9
52.5°	654.5	654.5	647.4	647.4	647.4	643.8	643.8	643.8	640.1	640.1	633.0
55°	564.6	564.6	557.5	557.5	553.9	550.2	546.6	546.6	535.9	535.9	525.1
57.5°	481.9	478.4	467.5	467.5	460.4	456.8	453.1	449.5	442.4	435.1	431.6
60°	406.4	399.2	392.0	388.4	381.2	374.0	366.9	359.6	352.5	348.9	345.2
62.5°	334.5	323.6	316.5	312.9	305.8	294.9	287.8	280.5	273.4	269.8	262.5
65°	269.8	259.0	248.1	244.5	237.4	230.1	219.4	212.2	205.0	201.4	201.4
67.5°	212.2	201.4	187.0	187.0	179.9	172.6	165.4	158.2	154.6	158.2	158.2
70°	158.2	151.0	140.2	136.6	129.5	122.2	118.6	118.6	118.6	122.2	118.6
72.5°	118.6	107.9	100.8	97.1	93.5	89.9	89.9	89.9	86.4	89.9	89.9
75°	82.8	75.5	68.4	68.4	64.8	64.8	64.8	64.8	64.8	64.8	64.8
77.5°	57.5	50.4	46.8	46.8	46.8	43.1	43.1	43.1	43.1	43.1	43.1
80°	36.0	36.0	32.4	32.4	28.8	28.8	28.8	28.8	28.8	28.8	28.8
82.5°	21.6	21.6	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
85°	10.8	10.8	10.8	10.8	10.8	7.2	7.2	7.2	7.2	7.2	7.2
87.5°	3.6	3.6	3.6	3.6	3.6	7.2	7.2	7.2	7.2	7.2	7.2
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: P252496

CATALOG NUMBER: LE_6B40D010 EC6B30508050 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5	2589.5
2.5°	2557.1	2567.9	2553.5	2564.2	2560.6	2557.1	2549.9	2564.2
5°	2513.9	2517.5	2503.1	2517.5	2513.9	2506.8	2499.5	2513.9
7.5°	2452.8	2463.6	2445.6	2460.0	2456.4	2449.1	2442.0	2456.4
10°	2384.5	2395.2	2380.9	2391.6	2391.6	2384.5	2373.6	2388.0
12.5°	2308.9	2316.1	2301.8	2316.1	2312.5	2305.4	2301.8	2312.5
15°	2226.2	2237.0	2222.6	2233.4	2229.8	2226.2	2222.6	2233.4
17.5°	2136.2	2147.1	2136.2	2147.1	2147.1	2136.2	2132.8	2139.9
20°	2046.4	2053.6	2042.8	2053.6	2050.0	2050.0	2042.8	2053.6
22.5°	1945.6	1956.5	1949.2	1956.5	1952.9	1952.9	1949.2	1956.5
25°	1845.0	1855.8	1845.0	1855.8	1852.1	1852.1	1845.0	1863.0
27.5°	1744.2	1751.5	1740.6	1755.1	1751.5	1744.2	1747.9	1751.5
30°	1636.4	1643.6	1636.4	1647.1	1647.1	1647.1	1640.0	1647.1
32.5°	1528.5	1539.2	1528.5	1539.2	1535.6	1535.6	1532.1	1539.2
35°	1420.6	1424.2	1417.0	1427.8	1427.8	1431.4	1424.2	1435.0
37.5°	1309.1	1312.8	1309.1	1312.8	1319.9	1309.1	1316.2	1319.9
40°	1194.0	1201.2	1197.6	1201.2	1201.2	1204.8	1201.2	1204.8
42.5°	1078.9	1086.1	1078.9	1089.8	1086.1	1086.1	1089.8	1089.8
45°	960.2	971.0	963.9	971.0	974.6	971.0	971.0	978.2
47.5°	848.8	856.0	852.4	856.0	856.0	856.0	856.0	863.1
50°	737.2	740.9	740.9	744.5	744.5	748.0	740.9	744.5
52.5°	625.8	633.0	633.0	633.0	629.4	633.0	633.0	633.0
55°	525.1	528.6	521.5	528.6	528.6	525.1	525.1	532.2
57.5°	428.0	428.0	428.0	428.0	428.0	424.4	428.0	428.0
60°	338.1	341.6	338.1	338.1	338.1	338.1	334.5	341.6
62.5°	262.5	262.5	259.0	262.5	262.5	262.5	266.1	266.1
65°	205.0	208.6	205.0	208.6	208.6	208.6	208.6	212.2
67.5°	161.9	161.9	161.9	161.9	161.9	161.9	161.9	161.9
70°	122.2	122.2	122.2	125.9	122.2	122.2	122.2	125.9
72.5°	89.9	89.9	89.9	89.9	89.9	89.9	93.5	93.5
75°	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8
77.5°	43.1	43.1	43.1	46.8	43.1	46.8	43.1	43.1
80°	28.8	28.8	28.8	28.8	28.8	28.8	28.8	28.8
82.5°	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
85°	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
87.5°	7.2	7.2	7.2	7.2	3.6	3.6	3.6	3.6
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)