

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: P252529

Luminaire Tested: **LE_6B60D010R EC6B60709727 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252529
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 EC6B60709727 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS 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: 4527.5 lumens
Efficiency: N/A
Efficacy: 72.4 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

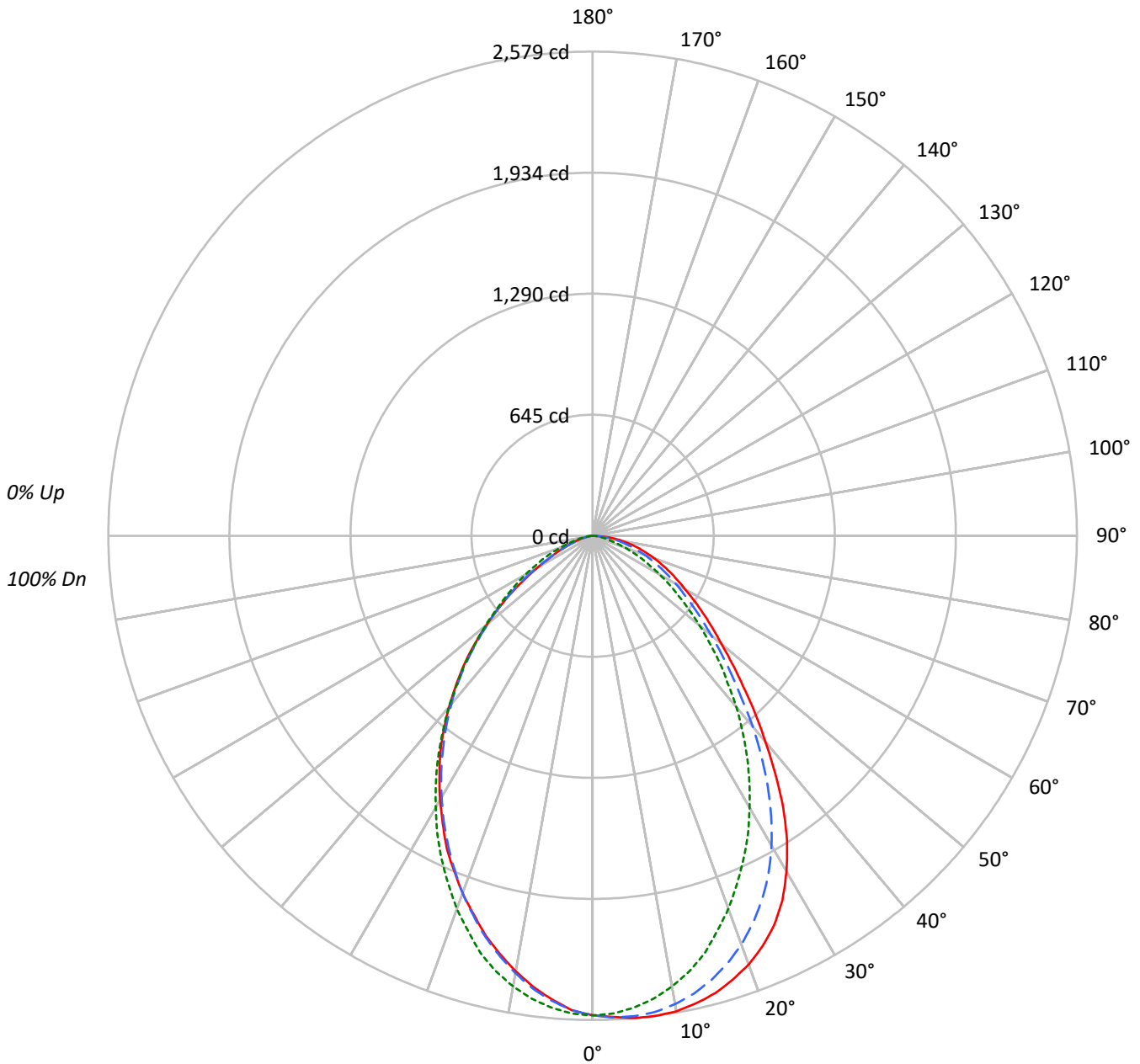
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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°	166631	166631	166631
5°	168898	165178	162389
10°	170381	161451	156045
15°	170355	155495	148795
20°	168709	146784	140633
25°	164709	136880	132280
30°	155533	125875	122402
35°	140986	114138	112736
40°	121753	101517	101211
45°	104406	88380	89026
50°	90738	75615	74539
55°	81509	63753	59715
60°	74061	53693	43972
65°	69545	44367	32295
70°	66305	34507	23672
75°	63497	25056	16107
80°	59963	17320	10670
85°	53147	10629	5315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.9	5.3
10°-20°	654.4	14.5
20°-30°	908.4	20.1
30°-40°	941.0	20.8
40°-50°	773.2	17.1
50°-60°	531.4	11.7
60°-70°	305.5	6.7
70°-80°	140.4	3.1
80°-90°	34.2	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°	1801.7	39.8
0°-40°	2742.7	60.6
0°-60°	4047.4	89.4
0°-90°	4527.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4527.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2554	2554	2554	2554	2554	
5°	2579	2568	2522	2487	2480	246
15°	2522	2448	2302	2210	2203	710
25°	2288	2136	1902	1820	1838	1047
35°	1770	1625	1433	1391	1416	1098
45°	1132	1046	958	947	965	881
55°	717	649	560	529	525	645
65°	450	394	287	202	209	448
75°	252	199	99	64	64	266
85°	71	50	14	7	7	80
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°	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1
2.5°	2564.9	2586.1	2571.9	2568.4	2575.5	2575.5	2575.5	2564.9	2571.9	2561.2	2568.4
5°	2579.0	2596.8	2582.5	2575.5	2582.5	2586.1	2575.5	2568.4	2579.0	2564.9	2568.4
7.5°	2579.0	2596.8	2582.5	2579.0	2582.5	2582.5	2579.0	2564.9	2571.9	2557.8	2557.8
10°	2571.9	2586.1	2571.9	2564.9	2568.4	2564.9	2564.9	2547.1	2550.6	2532.9	2532.9
12.5°	2550.6	2568.4	2550.6	2543.5	2543.5	2543.5	2532.9	2518.8	2522.2	2501.0	2497.4
15°	2522.2	2536.5	2518.8	2511.6	2511.6	2508.1	2501.0	2479.6	2479.6	2458.4	2447.8
17.5°	2479.6	2493.9	2479.6	2469.0	2465.5	2458.4	2451.2	2430.0	2422.9	2398.1	2387.5
20°	2430.0	2440.6	2426.5	2415.9	2408.8	2401.6	2387.5	2366.1	2359.1	2334.2	2316.5
22.5°	2366.1	2380.4	2359.1	2348.4	2341.4	2330.8	2316.5	2295.2	2284.6	2252.6	2231.4
25°	2288.1	2295.2	2277.5	2266.9	2252.6	2245.5	2234.9	2206.5	2195.9	2160.4	2135.6
27.5°	2188.8	2195.9	2174.6	2167.5	2149.8	2142.6	2128.5	2103.6	2089.5	2054.0	2029.1
30°	2064.6	2071.8	2057.5	2046.9	2032.8	2018.5	2007.9	1983.0	1961.8	1926.2	1905.0
32.5°	1926.2	1936.9	1922.8	1908.5	1883.8	1887.2	1869.5	1844.6	1827.0	1795.0	1770.2
35°	1770.2	1777.2	1759.5	1756.0	1741.8	1727.6	1709.9	1692.1	1681.5	1646.0	1624.8
37.5°	1596.4	1614.1	1596.4	1582.1	1575.1	1564.4	1553.8	1529.0	1521.9	1500.6	1472.2
40°	1429.6	1440.2	1429.6	1415.5	1404.8	1404.8	1390.6	1376.4	1358.6	1337.4	1326.8
42.5°	1280.6	1273.5	1270.0	1262.9	1248.8	1245.1	1241.6	1223.9	1213.2	1192.0	1174.2
45°	1131.6	1135.2	1128.1	1124.5	1113.9	1106.8	1099.8	1085.5	1082.0	1060.8	1046.5
47.5°	1007.5	1003.9	996.9	996.9	989.8	982.6	975.5	964.9	961.4	943.6	929.5
50°	894.0	897.5	894.0	890.4	879.8	876.2	869.1	862.0	855.0	837.2	823.0
52.5°	801.8	798.1	794.6	794.6	784.0	780.5	773.4	766.2	759.1	741.4	730.8
55°	716.6	716.6	713.0	709.5	698.9	695.2	691.8	684.6	674.0	659.9	649.2
57.5°	638.5	638.5	635.0	631.5	624.4	624.4	617.2	610.1	603.1	588.9	574.8
60°	567.6	571.1	567.6	564.0	557.0	557.0	553.4	542.8	539.2	521.5	510.9
62.5°	507.2	507.2	507.2	503.8	500.2	493.1	493.1	482.5	475.4	464.8	450.5
65°	450.5	450.5	450.5	447.0	439.9	436.4	432.8	425.8	418.6	408.0	393.8
67.5°	397.4	397.4	397.4	393.8	386.6	383.1	379.6	376.0	365.4	354.8	340.5
70°	347.6	347.6	344.1	340.5	337.0	333.5	329.9	322.9	315.8	301.5	290.9
72.5°	298.0	298.0	298.0	290.9	287.4	287.4	280.2	276.8	269.6	255.4	244.8
75°	251.9	248.4	248.4	244.8	241.2	237.6	234.1	230.6	220.0	212.9	198.6
77.5°	205.8	205.8	202.2	198.6	198.6	195.1	191.6	184.5	180.9	170.2	159.6
80°	159.6	159.6	159.6	159.6	156.1	152.5	152.5	145.5	141.9	131.2	124.1
82.5°	120.6	117.1	117.1	117.1	113.5	110.0	110.0	106.4	102.9	95.8	88.6
85°	71.0	67.4	67.4	67.4	63.9	63.9	60.2	60.2	56.8	49.6	49.6
87.5°	21.2	21.2	24.9	24.9	21.2	21.2	21.2	21.2	21.2	17.8	17.8
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°	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1
2.5°	2561.2	2571.9	2557.8	2554.1	2568.4	2561.2	2557.8	2550.6	2554.1	2547.1	2536.5
5°	2557.8	2571.9	2554.1	2543.5	2561.2	2550.6	2543.5	2536.5	2536.5	2522.2	2515.1
7.5°	2547.1	2554.1	2536.5	2525.8	2536.5	2525.8	2518.8	2508.1	2504.5	2486.8	2476.1
10°	2518.8	2525.8	2504.5	2490.4	2501.0	2486.8	2476.1	2465.5	2458.4	2437.1	2422.9
12.5°	2479.6	2483.2	2458.4	2440.6	2447.8	2437.1	2419.4	2405.1	2398.1	2376.8	2359.1
15°	2426.5	2430.0	2401.6	2376.8	2383.9	2369.8	2348.4	2334.2	2323.6	2302.2	2277.5
17.5°	2362.6	2359.1	2327.1	2302.2	2305.9	2288.1	2266.9	2245.5	2231.4	2206.5	2188.8
20°	2291.6	2281.0	2245.5	2217.1	2220.8	2199.4	2174.6	2153.4	2135.6	2114.2	2089.5
22.5°	2203.0	2188.8	2156.9	2121.4	2124.9	2107.2	2071.8	2054.0	2036.2	2007.9	1986.6
25°	2107.2	2085.9	2054.0	2018.5	2018.5	1997.2	1968.9	1947.6	1929.9	1901.5	1876.6
27.5°	1993.6	1983.0	1940.5	1912.1	1908.5	1887.2	1862.4	1837.6	1816.2	1791.5	1766.6
30°	1869.5	1851.8	1819.9	1787.9	1780.9	1763.1	1738.2	1709.9	1695.8	1670.9	1649.6
32.5°	1738.2	1720.5	1685.0	1653.1	1649.6	1635.4	1614.1	1585.8	1571.5	1553.8	1539.6
35°	1589.2	1582.1	1546.8	1521.9	1521.9	1507.6	1486.4	1461.5	1450.9	1433.1	1415.5
37.5°	1447.4	1436.8	1404.8	1383.5	1383.5	1365.8	1344.5	1333.9	1323.2	1309.0	1298.4
40°	1298.4	1291.2	1266.5	1245.1	1248.8	1234.5	1220.4	1206.1	1199.0	1192.0	1181.2
42.5°	1160.0	1152.9	1135.2	1117.5	1117.5	1106.8	1092.6	1082.0	1074.9	1064.2	1060.8
45°	1035.9	1025.2	1011.0	993.2	993.2	982.6	975.5	968.5	964.9	957.9	947.1
47.5°	915.2	908.1	894.0	876.2	876.2	876.2	862.0	851.4	851.4	844.2	840.8
50°	812.4	801.8	791.1	776.9	776.9	769.8	759.1	748.5	748.5	745.0	737.9
52.5°	716.6	709.5	695.2	681.1	681.1	674.0	663.4	659.9	656.2	645.6	642.1
55°	635.0	627.9	617.2	599.5	596.0	592.4	581.8	574.8	571.1	560.5	560.5
57.5°	560.5	553.4	535.6	525.0	521.5	514.4	503.8	496.6	493.1	486.0	478.9
60°	496.6	486.0	471.9	457.6	454.1	447.0	436.4	429.2	425.8	411.5	404.4
62.5°	436.4	425.8	411.5	397.4	393.8	386.6	372.5	365.4	358.2	344.1	337.0
65°	379.6	368.9	354.8	340.5	333.5	329.9	315.8	305.1	298.0	287.4	273.1
67.5°	326.4	315.8	301.5	283.8	283.8	273.1	262.5	251.9	241.2	230.6	220.0
70°	276.8	266.0	251.9	237.6	234.1	227.0	216.4	202.2	195.1	180.9	170.2
72.5°	230.6	220.0	205.8	191.6	188.0	180.9	170.2	156.1	145.5	134.8	124.1
75°	188.0	177.4	163.1	152.5	149.0	141.9	131.2	117.1	106.4	99.4	88.6
77.5°	149.0	138.4	127.8	117.1	113.5	106.4	95.8	88.6	78.0	71.0	60.2
80°	113.5	106.4	95.8	88.6	85.1	78.0	71.0	60.2	53.2	46.1	42.6
82.5°	81.6	74.5	67.4	56.8	56.8	49.6	46.1	39.0	31.9	28.4	24.9
85°	46.1	39.0	35.5	31.9	28.4	28.4	24.9	21.2	17.8	14.2	14.2
87.5°	14.2	14.2	10.6	10.6	10.6	10.6	7.1	7.1	7.1	7.1	7.1
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°	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1
2.5°	2536.5	2540.0	2532.9	2540.0	2532.9	2536.5	2529.4	2536.5	2529.4	2536.5	2522.2
5°	2511.6	2511.6	2501.0	2508.1	2501.0	2504.5	2490.4	2493.9	2486.8	2493.9	2479.6
7.5°	2469.0	2472.6	2454.9	2462.0	2451.2	2451.2	2440.6	2444.2	2433.6	2437.1	2426.5
10°	2419.4	2415.9	2398.1	2405.1	2391.0	2391.0	2380.4	2380.4	2366.1	2369.8	2355.5
12.5°	2348.4	2344.9	2323.6	2330.8	2316.5	2316.5	2305.9	2305.9	2291.6	2298.8	2284.6
15°	2266.9	2263.2	2242.0	2245.5	2231.4	2231.4	2217.1	2220.8	2210.1	2217.1	2203.0
17.5°	2174.6	2171.0	2149.8	2153.4	2135.6	2139.1	2128.5	2124.9	2117.9	2121.4	2110.8
20°	2078.9	2071.8	2050.5	2054.0	2046.9	2036.2	2029.1	2032.8	2025.6	2032.8	2022.0
22.5°	1979.5	1965.2	1947.6	1947.6	1940.5	1940.5	1929.9	1936.9	1922.8	1933.4	1926.2
25°	1866.0	1855.4	1841.1	1848.2	1834.0	1834.0	1823.4	1827.0	1819.9	1827.0	1819.9
27.5°	1756.0	1748.9	1727.6	1734.8	1724.1	1727.6	1717.0	1720.5	1717.0	1724.1	1717.0
30°	1638.9	1635.4	1621.2	1621.2	1617.6	1614.1	1610.5	1610.5	1607.0	1617.6	1610.5
32.5°	1529.0	1518.4	1504.1	1514.8	1497.0	1507.6	1500.6	1507.6	1500.6	1507.6	1504.1
35°	1415.5	1411.9	1394.1	1397.8	1394.1	1394.1	1390.6	1390.6	1390.6	1401.2	1401.2
37.5°	1294.9	1291.2	1280.6	1284.1	1277.1	1273.5	1273.5	1280.6	1280.6	1287.8	1287.8
40°	1177.8	1181.2	1170.6	1170.6	1167.1	1167.1	1167.1	1174.2	1170.6	1177.8	1174.2
42.5°	1060.8	1060.8	1050.0	1053.6	1050.0	1053.6	1053.6	1060.8	1060.8	1064.2	1060.8
45°	950.8	950.8	947.1	950.8	943.6	947.1	943.6	950.8	947.1	950.8	950.8
47.5°	840.8	840.8	840.8	837.2	837.2	837.2	837.2	837.2	833.6	840.8	837.2
50°	737.9	741.4	737.9	737.9	734.4	737.9	734.4	734.4	727.2	730.8	730.8
52.5°	645.6	645.6	638.5	638.5	638.5	635.0	635.0	635.0	631.5	631.5	624.4
55°	557.0	557.0	549.9	549.9	546.2	542.8	539.2	539.2	528.6	528.6	517.9
57.5°	475.4	471.9	461.1	461.1	454.1	450.5	447.0	443.4	436.4	429.2	425.8
60°	400.9	393.8	386.6	383.1	376.0	368.9	361.9	354.8	347.6	344.1	340.5
62.5°	329.9	319.2	312.1	308.6	301.5	290.9	283.8	276.8	269.6	266.0	259.0
65°	266.0	255.4	244.8	241.2	234.1	227.0	216.4	209.2	202.2	198.6	198.6
67.5°	209.2	198.6	184.5	184.5	177.4	170.2	163.1	156.1	152.5	156.1	156.1
70°	156.1	149.0	138.4	134.8	127.8	120.6	117.1	117.1	117.1	120.6	117.1
72.5°	117.1	106.4	99.4	95.8	92.2	88.6	88.6	88.6	85.1	88.6	88.6
75°	81.6	74.5	67.4	67.4	63.9	63.9	63.9	63.9	63.9	63.9	63.9
77.5°	56.8	49.6	46.1	46.1	46.1	42.6	42.6	42.6	42.6	42.6	42.6
80°	35.5	35.5	31.9	31.9	28.4	28.4	28.4	28.4	28.4	28.4	28.4
82.5°	21.2	21.2	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
85°	10.6	10.6	10.6	10.6	10.6	7.1	7.1	7.1	7.1	7.1	7.1
87.5°	3.5	3.5	3.5	3.5	3.5	7.1	7.1	7.1	7.1	7.1	7.1
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: P252529

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1	2554.1
2.5°	2522.2	2532.9	2518.8	2529.4	2525.8	2522.2	2515.1	2529.4
5°	2479.6	2483.2	2469.0	2483.2	2479.6	2472.6	2465.5	2479.6
7.5°	2419.4	2430.0	2412.2	2426.5	2422.9	2415.9	2408.8	2422.9
10°	2352.0	2362.6	2348.4	2359.1	2359.1	2352.0	2341.4	2355.5
12.5°	2277.5	2284.6	2270.4	2284.6	2281.0	2273.9	2270.4	2281.0
15°	2195.9	2206.5	2192.4	2203.0	2199.4	2195.9	2192.4	2203.0
17.5°	2107.2	2117.9	2107.2	2117.9	2117.9	2107.2	2103.6	2110.8
20°	2018.5	2025.6	2015.0	2025.6	2022.0	2022.0	2015.0	2025.6
22.5°	1919.1	1929.9	1922.8	1929.9	1926.2	1926.2	1922.8	1929.9
25°	1819.9	1830.5	1819.9	1830.5	1827.0	1827.0	1819.9	1837.6
27.5°	1720.5	1727.6	1717.0	1731.1	1727.6	1720.5	1724.1	1727.6
30°	1614.1	1621.2	1614.1	1624.8	1624.8	1624.8	1617.6	1624.8
32.5°	1507.6	1518.4	1507.6	1518.4	1514.8	1514.8	1511.2	1518.4
35°	1401.2	1404.8	1397.8	1408.4	1408.4	1411.9	1404.8	1415.5
37.5°	1291.2	1294.9	1291.2	1294.9	1301.9	1291.2	1298.4	1301.9
40°	1177.8	1184.9	1181.2	1184.9	1184.9	1188.4	1184.9	1188.4
42.5°	1064.2	1071.4	1064.2	1074.9	1071.4	1071.4	1074.9	1074.9
45°	947.1	957.9	950.8	957.9	961.4	957.9	957.9	964.9
47.5°	837.2	844.2	840.8	844.2	844.2	844.2	844.2	851.4
50°	727.2	730.8	730.8	734.4	734.4	737.9	730.8	734.4
52.5°	617.2	624.4	624.4	624.4	620.8	624.4	624.4	624.4
55°	517.9	521.5	514.4	521.5	521.5	517.9	517.9	525.0
57.5°	422.1	422.1	422.1	422.1	422.1	418.6	422.1	422.1
60°	333.5	337.0	333.5	333.5	333.5	333.5	329.9	337.0
62.5°	259.0	259.0	255.4	259.0	259.0	259.0	262.5	262.5
65°	202.2	205.8	202.2	205.8	205.8	205.8	205.8	209.2
67.5°	159.6	159.6	159.6	159.6	159.6	159.6	159.6	159.6
70°	120.6	120.6	120.6	124.1	120.6	120.6	120.6	124.1
72.5°	88.6	88.6	88.6	88.6	88.6	88.6	92.2	92.2
75°	63.9	63.9	63.9	63.9	63.9	63.9	63.9	63.9
77.5°	42.6	42.6	42.6	46.1	42.6	46.1	42.6	42.6
80°	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.4
82.5°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
85°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
87.5°	7.1	7.1	7.1	7.1	3.5	3.5	3.5	3.5
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)