

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: P252718

Luminaire Tested: **LE_6B50D010R EC6B30509024 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252718
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 EC6B30509024 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4507.5 lumens
Efficiency: N/A
Efficacy: 76.7 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

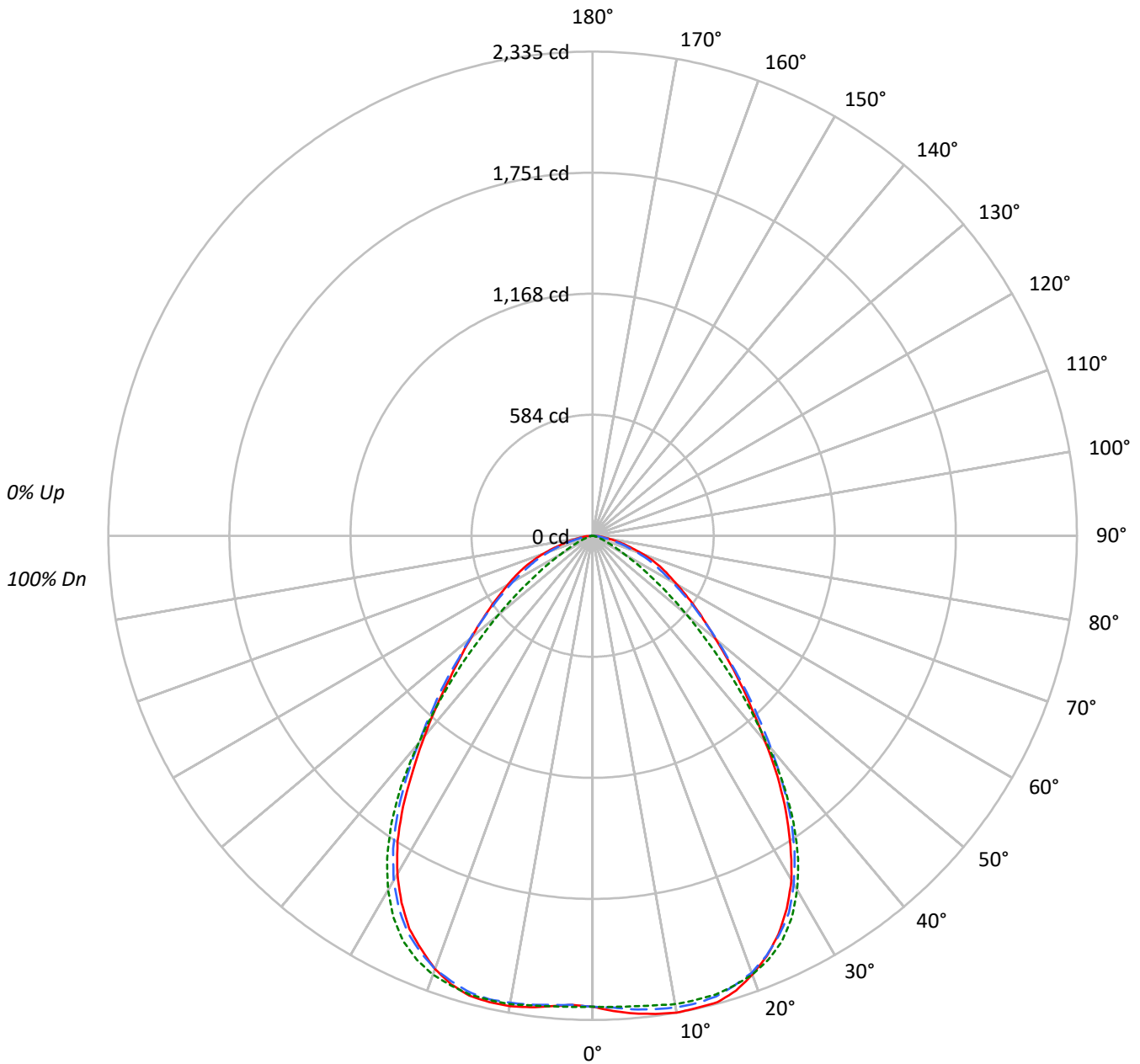
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	148161	148161	148161
5°	151465	149147	149147
10°	154700	151938	152574
15°	157292	154685	155117
20°	156337	156337	154324
25°	152608	155380	150528
30°	144459	148573	141793
35°	129454	134567	126889
40°	109966	111345	107232
45°	93058	85058	89791
50°	78568	59984	77594
55°	69054	38730	68314
60°	61196	23043	61600
65°	56516	13894	56516
70°	49023	7973	47783
75°	38844	4840	36424
80°	28967	3607	27765
85°	26499	2395	24029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.6	4.9
10°-20°	647.1	14.4
20°-30°	973.2	21.6
30°-40°	1023.2	22.7
40°-50°	764.4	17.0
50°-60°	475.9	10.6
60°-70°	270.6	6.0
70°-80°	111.5	2.5
80°-90°	23.0	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°	1838.9	40.8
0°-40°	2862.1	63.5
0°-60°	4102.4	91.0
0°-90°	4507.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4507.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2271	2271	2271	2271	2271	
5°	2313	2294	2277	2271	2277	221
15°	2329	2300	2290	2281	2297	655
25°	2120	2126	2158	2110	2091	970
35°	1625	1667	1690	1641	1593	1009
45°	1009	1031	922	1012	973	782
55°	607	594	340	585	601	546
65°	366	328	90	328	366	361
75°	154	122	19	119	144	167
85°	35	22	3	19	32	39
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°	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0
2.5°	2293.5	2290.2	2293.5	2287.0	2283.9	2283.9	2287.0	2280.6	2277.4	2280.6	2277.4
5°	2312.8	2306.2	2309.5	2306.2	2299.9	2299.9	2303.1	2293.5	2293.5	2296.6	2293.5
7.5°	2325.6	2325.6	2325.6	2319.1	2316.0	2312.8	2319.1	2309.5	2306.2	2306.2	2303.1
10°	2335.2	2332.0	2335.2	2328.8	2322.4	2319.1	2325.6	2319.1	2312.8	2319.1	2309.5
12.5°	2332.0	2332.0	2332.0	2328.8	2322.4	2319.1	2325.6	2316.0	2312.8	2316.0	2309.5
15°	2328.8	2319.1	2322.4	2319.1	2309.5	2309.5	2312.8	2303.1	2296.6	2306.2	2299.9
17.5°	2299.9	2293.5	2296.6	2290.2	2283.9	2280.6	2283.9	2280.6	2274.1	2280.6	2274.1
20°	2251.8	2251.8	2254.9	2248.5	2242.1	2238.9	2245.2	2238.9	2232.4	2242.1	2242.1
22.5°	2193.9	2193.9	2193.9	2190.6	2187.5	2187.5	2187.5	2184.2	2181.0	2187.5	2190.6
25°	2120.0	2116.8	2120.0	2123.2	2120.0	2116.8	2120.0	2120.0	2113.6	2126.4	2126.4
27.5°	2026.9	2026.9	2033.2	2030.1	2030.1	2026.9	2033.2	2033.2	2030.1	2039.8	2049.4
30°	1917.6	1911.2	1917.6	1917.6	1920.9	1920.9	1924.1	1924.1	1924.1	1933.8	1940.1
32.5°	1776.2	1779.5	1789.1	1786.0	1782.8	1792.4	1792.4	1798.8	1802.0	1808.4	1811.6
35°	1625.4	1628.5	1628.5	1631.8	1638.1	1631.8	1647.9	1644.6	1647.9	1660.6	1667.1
37.5°	1464.8	1455.1	1471.1	1464.8	1468.0	1468.0	1474.4	1477.6	1487.2	1503.2	1503.2
40°	1291.2	1294.5	1300.9	1304.1	1307.4	1307.4	1307.4	1317.0	1320.1	1339.5	1336.2
42.5°	1140.2	1140.2	1146.8	1150.0	1150.0	1150.0	1150.0	1159.6	1166.0	1172.4	1178.9
45°	1008.6	999.0	1005.4	1005.4	1011.9	1008.6	1015.0	1021.5	1024.6	1034.2	1031.1
47.5°	883.4	880.1	883.4	886.5	883.4	886.5	889.8	893.0	896.1	896.1	896.1
50°	774.1	774.1	777.4	780.5	780.5	780.5	780.5	783.8	783.8	790.1	783.8
52.5°	684.1	687.4	687.4	684.1	687.4	687.4	690.6	690.6	687.4	687.4	677.8
55°	607.1	603.9	607.1	603.9	607.1	607.1	603.9	603.9	600.6	597.5	594.2
57.5°	533.2	533.2	533.2	533.2	530.0	533.2	530.0	526.8	526.8	520.4	510.8
60°	469.0	469.0	469.0	469.0	469.0	465.8	469.0	465.8	459.4	452.9	440.0
62.5°	414.4	411.1	414.4	411.1	411.1	408.0	408.0	404.8	398.2	391.9	379.0
65°	366.1	369.4	366.1	366.1	363.0	359.8	359.8	356.5	346.9	340.5	327.6
67.5°	314.8	311.6	311.6	311.6	308.4	308.4	308.4	302.0	295.5	285.9	273.0
70°	257.0	257.0	257.0	253.8	253.8	250.5	250.5	247.4	240.9	234.5	218.4
72.5°	202.4	202.4	202.4	196.0	199.1	196.0	196.0	189.5	186.2	176.6	167.0
75°	154.1	154.1	151.0	151.0	147.8	144.5	144.5	141.4	138.1	131.8	122.0
77.5°	112.4	112.4	112.4	109.2	106.0	102.8	102.8	99.6	96.4	93.1	86.8
80°	77.1	77.1	77.1	77.1	73.9	70.6	70.6	67.5	67.5	64.2	57.9
82.5°	51.4	51.4	51.4	51.4	48.1	48.1	48.1	45.0	41.8	41.8	35.4
85°	35.4	35.4	32.1	32.1	32.1	32.1	28.9	28.9	25.8	22.5	22.5
87.5°	19.2	19.2	19.2	19.2	16.0	16.0	16.0	16.0	12.9	12.9	9.6
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0
2.5°	2287.0	2287.0	2283.9	2274.1	2277.4	2274.1	2277.4	2274.1	2264.5	2274.1	2264.5
5°	2299.9	2303.1	2296.6	2283.9	2287.0	2283.9	2283.9	2280.6	2271.0	2277.4	2271.0
7.5°	2312.8	2309.5	2306.2	2293.5	2296.6	2293.5	2293.5	2287.0	2277.4	2283.9	2274.1
10°	2319.1	2319.1	2312.8	2299.9	2299.9	2296.6	2299.9	2296.6	2283.9	2293.5	2287.0
12.5°	2319.1	2316.0	2316.0	2299.9	2303.1	2299.9	2303.1	2296.6	2287.0	2293.5	2290.2
15°	2309.5	2309.5	2306.2	2290.2	2293.5	2293.5	2296.6	2290.2	2280.6	2290.2	2283.9
17.5°	2290.2	2290.2	2287.0	2274.1	2280.6	2280.6	2283.9	2277.4	2267.8	2274.1	2274.1
20°	2251.8	2254.9	2254.9	2245.2	2251.8	2251.8	2254.9	2251.8	2248.5	2251.8	2245.2
22.5°	2206.8	2213.1	2213.1	2203.5	2210.0	2210.0	2219.6	2216.4	2210.0	2213.1	2210.0
25°	2139.2	2145.8	2152.1	2145.8	2152.1	2152.1	2161.8	2158.5	2152.1	2158.5	2148.9
27.5°	2062.1	2065.4	2071.9	2065.4	2075.0	2071.9	2081.5	2078.2	2068.6	2078.2	2075.0
30°	1953.0	1965.9	1975.5	1965.9	1975.5	1975.5	1981.9	1978.6	1975.5	1972.2	1972.2
32.5°	1830.9	1843.8	1843.8	1840.5	1847.0	1847.0	1850.1	1843.8	1840.5	1843.8	1847.0
35°	1680.0	1686.4	1692.8	1689.6	1692.8	1696.0	1692.8	1696.0	1686.4	1689.6	1689.6
37.5°	1516.1	1522.5	1522.5	1512.9	1519.4	1519.4	1512.9	1512.9	1506.5	1512.9	1500.1
40°	1342.6	1336.2	1339.5	1333.0	1326.6	1326.6	1323.4	1310.5	1304.1	1307.4	1310.5
42.5°	1172.4	1172.4	1162.8	1146.8	1130.6	1130.6	1121.0	1114.6	1101.8	1108.1	1105.0
45°	1027.9	1011.9	999.0	973.2	963.6	957.2	941.1	925.1	918.6	921.9	918.6
47.5°	889.8	876.9	844.8	809.5	799.9	790.1	770.9	751.6	745.2	738.8	738.8
50°	774.1	751.6	716.2	677.8	661.8	645.6	620.0	600.6	587.9	591.0	591.0
52.5°	668.1	642.4	600.6	552.5	533.2	514.0	491.5	469.0	459.4	456.1	456.1
55°	575.0	546.0	504.2	449.8	433.6	411.1	382.2	356.5	343.8	340.5	346.9
57.5°	491.5	465.8	417.6	363.0	343.8	321.2	292.2	269.9	253.8	250.5	253.8
60°	424.0	388.6	346.9	295.5	269.9	250.5	218.4	199.1	183.1	176.6	179.9
62.5°	356.5	324.4	282.6	231.2	212.0	192.8	163.9	141.4	128.5	125.2	128.5
65°	305.1	273.0	234.5	189.5	170.2	151.0	125.2	102.8	93.1	90.0	93.1
67.5°	253.8	224.9	192.8	151.0	134.9	118.9	93.1	77.1	64.2	61.0	64.2
70°	205.6	179.9	147.8	118.9	102.8	90.0	70.6	54.6	45.0	41.8	45.0
72.5°	154.1	134.9	112.4	86.8	77.1	67.5	51.4	38.5	32.1	28.9	32.1
75°	112.4	96.4	80.2	61.0	54.6	48.1	35.4	25.8	22.5	19.2	22.5
77.5°	77.1	67.5	54.6	41.8	35.4	32.1	22.5	19.2	16.0	12.9	12.9
80°	51.4	45.0	35.4	28.9	25.8	22.5	16.0	12.9	9.6	9.6	9.6
82.5°	32.1	25.8	22.5	16.0	12.9	12.9	9.6	6.4	6.4	6.4	6.4
85°	19.2	16.0	12.9	9.6	6.4	6.4	3.2	3.2	3.2	3.2	3.2
87.5°	9.6	6.4	6.4	3.2	3.2	3.2	3.2	3.2	0.0	0.0	3.2
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°	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0
2.5°	2271.0	2264.5	2264.5	2267.8	2271.0	2274.1	2267.8	2264.5	2264.5	2274.1	2267.8
5°	2271.0	2267.8	2267.8	2267.8	2274.1	2277.4	2271.0	2267.8	2271.0	2280.6	2277.4
7.5°	2280.6	2274.1	2277.4	2277.4	2280.6	2287.0	2280.6	2277.4	2280.6	2290.2	2283.9
10°	2287.0	2280.6	2283.9	2280.6	2290.2	2293.5	2287.0	2283.9	2287.0	2299.9	2296.6
12.5°	2290.2	2287.0	2287.0	2283.9	2293.5	2296.6	2290.2	2287.0	2290.2	2299.9	2296.6
15°	2283.9	2280.6	2280.6	2280.6	2287.0	2293.5	2283.9	2280.6	2280.6	2290.2	2287.0
17.5°	2271.0	2264.5	2264.5	2264.5	2267.8	2271.0	2261.4	2258.1	2254.9	2264.5	2261.4
20°	2248.5	2242.1	2235.6	2235.6	2238.9	2238.9	2232.4	2222.8	2222.8	2226.0	2219.6
22.5°	2206.8	2203.5	2197.1	2193.9	2200.2	2197.1	2184.2	2174.6	2171.4	2174.6	2168.1
25°	2148.9	2142.5	2139.2	2136.1	2139.2	2136.1	2123.2	2110.4	2110.4	2110.4	2100.8
27.5°	2068.6	2062.1	2059.0	2059.0	2062.1	2055.8	2042.9	2030.1	2023.6	2023.6	2014.0
30°	1965.9	1965.9	1962.6	1959.4	1956.1	1956.1	1936.9	1924.1	1917.6	1920.9	1914.4
32.5°	1840.5	1837.4	1834.1	1824.5	1827.8	1824.5	1808.4	1798.8	1789.1	1782.8	1779.5
35°	1680.0	1680.0	1676.8	1676.8	1676.8	1673.5	1657.5	1647.9	1641.4	1638.1	1628.5
37.5°	1503.2	1500.1	1496.9	1496.9	1496.9	1496.9	1487.2	1477.6	1477.6	1474.4	1468.0
40°	1304.1	1307.4	1310.5	1307.4	1317.0	1326.6	1313.8	1307.4	1304.1	1313.8	1300.9
42.5°	1111.4	1108.1	1124.2	1127.5	1127.5	1143.5	1146.8	1150.0	1146.8	1153.1	1153.1
45°	925.1	921.9	938.0	944.4	960.4	979.8	989.4	1005.4	1011.9	1018.2	1011.9
47.5°	748.4	761.2	774.1	790.1	803.0	835.1	854.4	870.5	876.9	886.5	886.5
50°	600.6	613.5	636.0	648.9	664.9	703.5	735.6	758.0	770.9	780.5	777.4
52.5°	462.5	485.0	514.0	526.8	549.2	594.2	629.6	655.2	671.4	681.0	684.1
55°	356.5	375.9	404.8	424.0	446.5	494.6	539.6	568.5	584.6	597.5	603.9
57.5°	263.4	285.9	318.0	334.0	359.8	414.4	452.9	488.2	507.5	523.6	526.8
60°	192.8	215.2	244.1	263.4	289.1	343.8	388.6	420.8	443.2	456.1	462.5
62.5°	138.1	160.6	189.5	208.8	231.2	279.5	324.4	356.5	379.0	395.1	404.8
65°	99.6	122.0	151.0	167.0	186.2	231.2	273.0	305.1	327.6	346.9	353.4
67.5°	73.9	90.0	115.6	131.8	151.0	186.2	221.6	250.5	273.0	289.1	295.5
70°	54.6	67.5	90.0	99.6	112.4	144.5	173.5	199.1	218.4	231.2	237.8
72.5°	38.5	48.1	64.2	73.9	83.5	109.2	131.8	151.0	163.9	176.6	183.1
75°	25.8	32.1	45.0	51.4	57.9	77.1	93.1	109.2	118.9	128.5	131.8
77.5°	16.0	22.5	32.1	35.4	41.8	51.4	64.2	73.9	80.2	86.8	93.1
80°	9.6	12.9	19.2	22.5	25.8	35.4	41.8	48.1	54.6	61.0	64.2
82.5°	6.4	9.6	12.9	12.9	16.0	19.2	25.8	32.1	35.4	38.5	41.8
85°	3.2	3.2	6.4	6.4	9.6	9.6	12.9	16.0	19.2	22.5	25.8
87.5°	3.2	3.2	3.2	3.2	6.4	6.4	9.6	9.6	9.6	12.9	12.9
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: P252718

CATALOG NUMBER: LE_6B50D010R EC6B30509024 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0	2271.0
2.5°	2261.4	2271.0	2261.4	2267.8	2264.5	2264.5	2261.4	2264.5
5°	2271.0	2283.9	2271.0	2280.6	2274.1	2274.1	2274.1	2277.4
7.5°	2280.6	2293.5	2283.9	2293.5	2290.2	2287.0	2287.0	2293.5
10°	2290.2	2299.9	2293.5	2303.1	2299.9	2296.6	2296.6	2303.1
12.5°	2290.2	2303.1	2296.6	2306.2	2303.1	2299.9	2299.9	2303.1
15°	2280.6	2296.6	2287.0	2296.6	2293.5	2290.2	2290.2	2296.6
17.5°	2251.8	2264.5	2258.1	2264.5	2264.5	2261.4	2264.5	2267.8
20°	2213.1	2222.8	2216.4	2222.8	2222.8	2216.4	2219.6	2222.8
22.5°	2158.5	2168.1	2161.8	2168.1	2165.0	2161.8	2161.8	2158.5
25°	2091.1	2104.0	2094.2	2100.8	2094.2	2087.9	2087.9	2091.1
27.5°	2007.6	2017.2	2004.4	2010.8	2004.4	1998.0	1998.0	1994.8
30°	1898.4	1901.6	1892.0	1898.4	1892.0	1888.8	1882.2	1882.2
32.5°	1766.6	1769.9	1760.2	1760.2	1753.9	1753.9	1741.0	1750.6
35°	1612.5	1615.8	1612.5	1609.2	1599.6	1596.4	1593.2	1593.2
37.5°	1451.9	1451.9	1442.2	1439.0	1432.6	1426.1	1429.4	1419.8
40°	1288.1	1284.9	1275.2	1278.4	1275.2	1265.6	1262.4	1259.1
42.5°	1133.9	1133.9	1124.2	1127.5	1121.0	1117.9	1108.1	1111.4
45°	999.0	999.0	989.4	989.4	986.1	976.5	979.8	973.2
47.5°	876.9	876.9	873.8	873.8	864.1	860.9	860.9	860.9
50°	770.9	770.9	770.9	770.9	767.8	764.5	761.2	764.5
52.5°	681.0	687.4	684.1	684.1	681.0	677.8	674.5	674.5
55°	600.6	603.9	603.9	607.1	603.9	600.6	603.9	600.6
57.5°	530.0	536.4	536.4	536.4	536.4	536.4	533.2	530.0
60°	469.0	472.1	472.1	475.4	475.4	475.4	472.1	472.1
62.5°	408.0	414.4	417.6	417.6	420.8	417.6	417.6	417.6
65°	359.8	366.1	369.4	366.1	369.4	369.4	366.1	366.1
67.5°	302.0	308.4	308.4	308.4	308.4	311.6	308.4	308.4
70°	244.1	250.5	247.4	250.5	250.5	250.5	250.5	250.5
72.5°	186.2	189.5	192.8	192.8	196.0	192.8	192.8	192.8
75°	134.9	141.4	141.4	141.4	141.4	144.5	144.5	144.5
77.5°	96.4	99.6	99.6	102.8	102.8	102.8	102.8	106.0
80°	67.5	67.5	70.6	70.6	73.9	73.9	73.9	73.9
82.5°	45.0	48.1	48.1	48.1	48.1	48.1	48.1	48.1
85°	25.8	28.9	28.9	28.9	28.9	32.1	32.1	32.1
87.5°	16.0	16.0	16.0	16.0	16.0	16.0	12.9	12.9
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)