

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: P252710

Luminaire Tested: **LE_6B40D010 EC6B30509050 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252710
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_6B40D010 EC6B30509050 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4248.7 lumens
Efficiency: N/A
Efficacy: 98.8 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

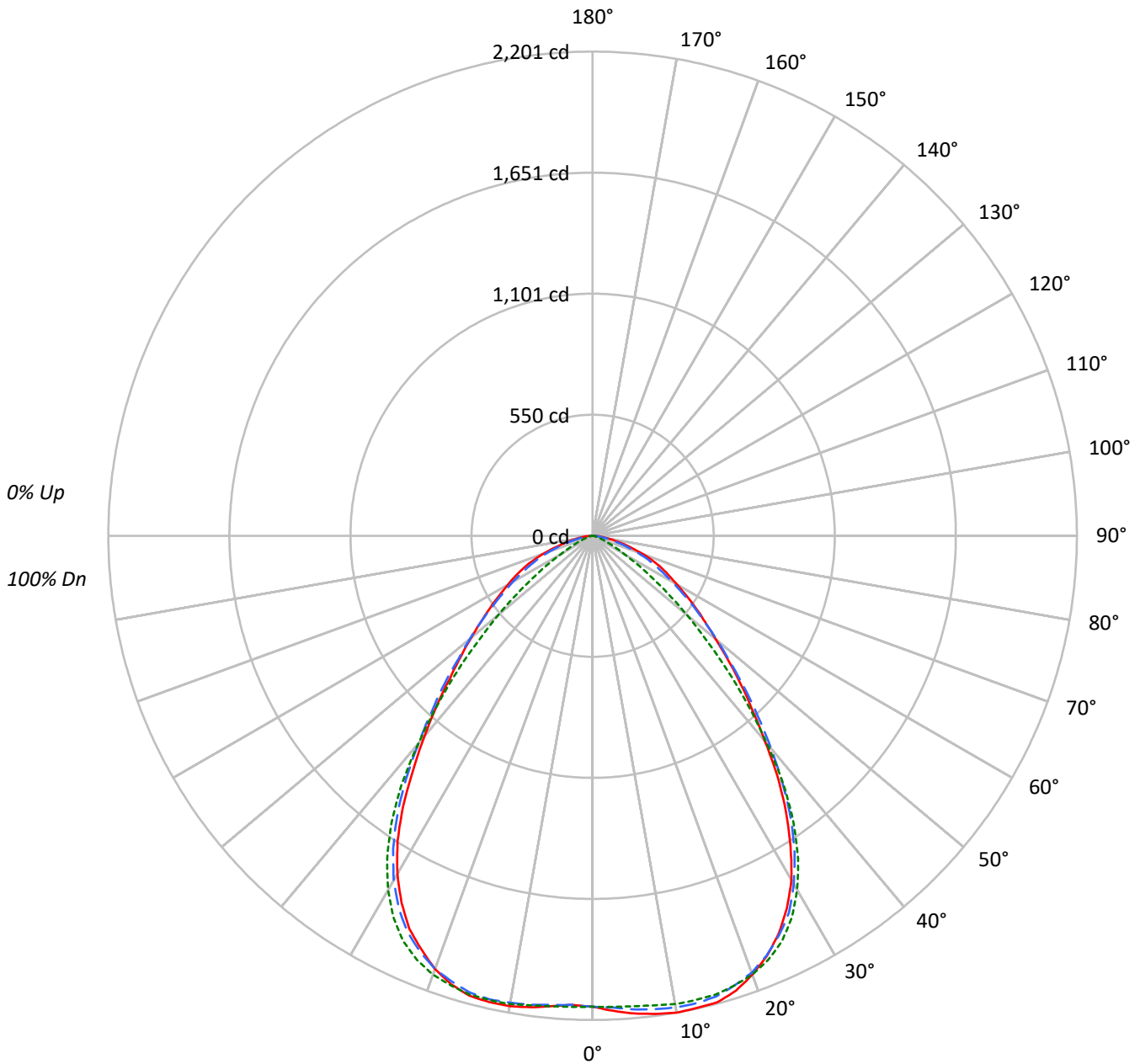
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
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	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°	139654	139654	139654
5°	142768	140580	140580
10°	145816	143213	143816
15°	148262	145810	146222
20°	147360	147360	145465
25°	143841	146461	141883
30°	136165	140045	133656
35°	122015	126841	119610
40°	103655	104941	101083
45°	87725	80178	84643
50°	74052	56544	73138
55°	65084	36512	64390
60°	57673	21725	58077
65°	53274	13091	53274
70°	46200	7516	45036
75°	36651	4562	34332
80°	27276	3419	26149
85°	24852	2246	22606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.1	4.9
10°-20°	609.9	14.4
20°-30°	917.3	21.6
30°-40°	964.5	22.7
40°-50°	720.5	17.0
50°-60°	448.5	10.6
60°-70°	255.1	6.0
70°-80°	105.1	2.5
80°-90°	21.7	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°	1733.4	40.8
0°-40°	2697.8	63.5
0°-60°	3866.9	91.0
0°-90°	4248.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4248.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2141	2141	2141	2141	2141	
5°	2180	2162	2147	2141	2147	209
15°	2195	2168	2159	2150	2165	617
25°	1998	2004	2035	1989	1971	915
35°	1532	1571	1593	1547	1502	951
45°	951	972	869	954	917	737
55°	572	560	321	551	566	515
65°	345	309	85	309	345	340
75°	145	115	18	112	136	158
85°	33	21	3	18	30	37
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°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2161.8	2158.8	2161.8	2155.8	2152.8	2152.8	2155.8	2149.8	2146.6	2149.8	2146.6
5°	2180.0	2173.9	2177.0	2173.9	2167.9	2167.9	2170.9	2161.8	2161.8	2164.9	2161.8
7.5°	2192.1	2192.1	2192.1	2186.0	2183.0	2180.0	2186.0	2177.0	2173.9	2173.9	2170.9
10°	2201.1	2198.1	2201.1	2195.1	2189.0	2186.0	2192.1	2186.0	2180.0	2186.0	2177.0
12.5°	2198.1	2198.1	2198.1	2195.1	2189.0	2186.0	2192.1	2183.0	2180.0	2183.0	2177.0
15°	2195.1	2186.0	2189.0	2186.0	2177.0	2177.0	2180.0	2170.9	2164.9	2173.9	2167.9
17.5°	2167.9	2161.8	2164.9	2158.8	2152.8	2149.8	2152.8	2149.8	2143.6	2149.8	2143.6
20°	2122.5	2122.5	2125.5	2119.4	2113.4	2110.4	2116.4	2110.4	2104.2	2113.4	2113.4
22.5°	2068.0	2068.0	2068.0	2064.9	2061.9	2061.9	2061.9	2058.9	2055.9	2061.9	2064.9
25°	1998.2	1995.2	1998.2	2001.4	1998.2	1995.2	1998.2	1998.2	1992.2	2004.4	2004.4
27.5°	1910.5	1910.5	1916.5	1913.5	1913.5	1910.5	1916.5	1916.5	1913.5	1922.6	1931.8
30°	1807.5	1801.5	1807.5	1807.5	1810.6	1810.6	1813.6	1813.6	1813.6	1822.8	1828.8
32.5°	1674.4	1677.4	1686.5	1683.4	1680.4	1689.5	1689.5	1695.5	1698.5	1704.6	1707.6
35°	1532.0	1535.1	1535.1	1538.1	1544.1	1538.1	1553.2	1550.2	1553.2	1565.4	1571.4
37.5°	1380.6	1371.6	1386.8	1380.6	1383.6	1383.6	1389.8	1392.8	1401.9	1417.0	1417.0
40°	1217.1	1220.1	1226.2	1229.2	1232.2	1232.2	1232.2	1241.4	1244.4	1262.6	1259.5
42.5°	1074.9	1074.9	1080.9	1083.9	1083.9	1083.9	1083.9	1093.0	1099.1	1105.1	1111.1
45°	950.8	941.6	947.6	947.6	953.8	950.8	956.8	962.9	965.9	974.9	971.9
47.5°	832.6	829.6	832.6	835.6	832.6	835.6	838.6	841.8	844.8	844.8	844.8
50°	729.6	729.6	732.8	735.8	735.8	735.8	735.8	738.8	738.8	744.9	738.8
52.5°	644.9	647.9	647.9	644.9	647.9	647.9	651.0	651.0	647.9	647.9	638.9
55°	572.2	569.2	572.2	569.2	572.2	572.2	569.2	569.2	566.1	563.1	560.1
57.5°	502.6	502.6	502.6	502.6	499.6	502.6	499.6	496.5	496.5	490.5	481.4
60°	442.0	442.0	442.0	442.0	442.0	439.0	442.0	439.0	433.0	426.9	414.8
62.5°	390.6	387.5	390.6	387.5	387.5	384.5	384.5	381.5	375.5	369.4	357.2
65°	345.1	348.2	345.1	345.1	342.1	339.1	339.1	336.1	327.0	321.0	308.9
67.5°	296.8	293.8	293.8	293.8	290.6	290.6	290.6	284.6	278.5	269.5	257.4
70°	242.2	242.2	242.2	239.2	239.2	236.1	236.1	233.1	227.1	221.0	205.9
72.5°	190.8	190.8	190.8	184.8	187.8	184.8	184.8	178.6	175.6	166.5	157.5
75°	145.4	145.4	142.2	142.2	139.2	136.2	136.2	133.2	130.2	124.1	115.0
77.5°	106.0	106.0	106.0	103.0	99.9	96.9	96.9	93.9	90.9	87.8	81.8
80°	72.6	72.6	72.6	72.6	69.6	66.6	66.6	63.6	63.6	60.5	54.5
82.5°	48.5	48.5	48.5	48.5	45.4	45.4	45.4	42.4	39.4	39.4	33.2
85°	33.2	33.2	30.2	30.2	30.2	30.2	27.2	27.2	24.2	21.2	21.2
87.5°	18.1	18.1	18.1	18.1	15.1	15.1	15.1	15.1	12.1	12.1	9.1
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2155.8	2155.8	2152.8	2143.6	2146.6	2143.6	2146.6	2143.6	2134.5	2143.6	2134.5
5°	2167.9	2170.9	2164.9	2152.8	2155.8	2152.8	2152.8	2149.8	2140.6	2146.6	2140.6
7.5°	2180.0	2177.0	2173.9	2161.8	2164.9	2161.8	2161.8	2155.8	2146.6	2152.8	2143.6
10°	2186.0	2186.0	2180.0	2167.9	2167.9	2164.9	2167.9	2164.9	2152.8	2161.8	2155.8
12.5°	2186.0	2183.0	2183.0	2167.9	2170.9	2167.9	2170.9	2164.9	2155.8	2161.8	2158.8
15°	2177.0	2177.0	2173.9	2158.8	2161.8	2161.8	2164.9	2158.8	2149.8	2158.8	2152.8
17.5°	2158.8	2158.8	2155.8	2143.6	2149.8	2149.8	2152.8	2146.6	2137.6	2143.6	2143.6
20°	2122.5	2125.5	2125.5	2116.4	2122.5	2122.5	2125.5	2122.5	2119.4	2122.5	2116.4
22.5°	2080.0	2086.1	2086.1	2077.0	2083.1	2083.1	2092.1	2089.1	2083.1	2086.1	2083.1
25°	2016.5	2022.5	2028.6	2022.5	2028.6	2028.6	2037.6	2034.6	2028.6	2034.6	2025.5
27.5°	1943.8	1946.9	1952.9	1946.9	1955.9	1952.9	1962.0	1959.0	1949.9	1959.0	1955.9
30°	1840.9	1853.0	1862.0	1853.0	1862.0	1862.0	1868.1	1865.1	1862.0	1859.0	1859.0
32.5°	1725.8	1737.9	1737.9	1734.9	1741.0	1741.0	1744.0	1737.9	1734.9	1737.9	1741.0
35°	1583.5	1589.6	1595.6	1592.6	1595.6	1598.6	1595.6	1598.6	1589.6	1592.6	1592.6
37.5°	1429.1	1435.1	1435.1	1426.1	1432.1	1432.1	1426.1	1426.1	1420.0	1426.1	1414.0
40°	1265.6	1259.5	1262.6	1256.5	1250.5	1250.5	1247.4	1235.4	1229.2	1232.2	1235.4
42.5°	1105.1	1105.1	1096.0	1080.9	1065.8	1065.8	1056.6	1050.6	1038.5	1044.6	1041.5
45°	968.9	953.8	941.6	917.4	908.4	902.2	887.1	872.0	865.9	869.0	865.9
47.5°	838.6	826.6	796.2	763.0	753.9	744.9	726.6	708.5	702.4	696.4	696.4
50°	729.6	708.5	675.1	638.9	623.8	608.6	584.4	566.1	554.1	557.1	557.1
52.5°	629.8	605.5	566.1	520.8	502.6	484.5	463.2	442.0	433.0	430.0	430.0
55°	542.0	514.8	475.4	423.9	408.8	387.5	360.2	336.1	324.0	321.0	327.0
57.5°	463.2	439.0	393.6	342.1	324.0	302.8	275.5	254.4	239.2	236.1	239.2
60°	399.6	366.4	327.0	278.5	254.4	236.1	205.9	187.8	172.6	166.5	169.5
62.5°	336.1	305.8	266.5	218.0	199.9	181.6	154.4	133.2	121.1	118.1	121.1
65°	287.6	257.4	221.0	178.6	160.5	142.2	118.1	96.9	87.8	84.8	87.8
67.5°	239.2	212.0	181.6	142.2	127.1	112.0	87.8	72.6	60.5	57.5	60.5
70°	193.8	169.5	139.2	112.0	96.9	84.8	66.6	51.5	42.4	39.4	42.4
72.5°	145.4	127.1	106.0	81.8	72.6	63.6	48.5	36.4	30.2	27.2	30.2
75°	106.0	90.9	75.8	57.5	51.5	45.4	33.2	24.2	21.2	18.1	21.2
77.5°	72.6	63.6	51.5	39.4	33.2	30.2	21.2	18.1	15.1	12.1	12.1
80°	48.5	42.4	33.2	27.2	24.2	21.2	15.1	12.1	9.1	9.1	9.1
82.5°	30.2	24.2	21.2	15.1	12.1	12.1	9.1	6.0	6.0	6.0	6.0
85°	18.1	15.1	12.1	9.1	6.0	6.0	3.0	3.0	3.0	3.0	3.0
87.5°	9.1	6.0	6.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	3.0
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2140.6	2134.5	2134.5	2137.6	2140.6	2143.6	2137.6	2134.5	2134.5	2143.6	2137.6
5°	2140.6	2137.6	2137.6	2137.6	2143.6	2146.6	2140.6	2137.6	2140.6	2149.8	2146.6
7.5°	2149.8	2143.6	2146.6	2146.6	2149.8	2155.8	2149.8	2146.6	2149.8	2158.8	2152.8
10°	2155.8	2149.8	2152.8	2149.8	2158.8	2161.8	2155.8	2152.8	2155.8	2167.9	2164.9
12.5°	2158.8	2155.8	2155.8	2152.8	2161.8	2164.9	2158.8	2155.8	2158.8	2167.9	2164.9
15°	2152.8	2149.8	2149.8	2149.8	2155.8	2161.8	2152.8	2149.8	2149.8	2158.8	2155.8
17.5°	2140.6	2134.5	2134.5	2134.5	2137.6	2140.6	2131.5	2128.5	2125.5	2134.5	2131.5
20°	2119.4	2113.4	2107.2	2107.2	2110.4	2110.4	2104.2	2095.2	2095.2	2098.2	2092.1
22.5°	2080.0	2077.0	2071.0	2068.0	2074.0	2071.0	2058.9	2049.8	2046.8	2049.8	2043.8
25°	2025.5	2019.5	2016.5	2013.5	2016.5	2013.5	2001.4	1989.2	1989.2	1989.2	1980.1
27.5°	1949.9	1943.8	1940.8	1940.8	1943.8	1937.8	1925.6	1913.5	1907.5	1907.5	1898.4
30°	1853.0	1853.0	1850.0	1846.9	1843.9	1843.9	1825.8	1813.6	1807.5	1810.6	1804.5
32.5°	1734.9	1731.9	1728.9	1719.8	1722.8	1719.8	1704.6	1695.5	1686.5	1680.4	1677.4
35°	1583.5	1583.5	1580.5	1580.5	1580.5	1577.5	1562.4	1553.2	1547.1	1544.1	1535.1
37.5°	1417.0	1414.0	1410.9	1410.9	1410.9	1410.9	1401.9	1392.8	1392.8	1389.8	1383.6
40°	1229.2	1232.2	1235.4	1232.2	1241.4	1250.5	1238.4	1232.2	1229.2	1238.4	1226.2
42.5°	1047.6	1044.6	1059.8	1062.8	1062.8	1077.9	1080.9	1083.9	1080.9	1087.0	1087.0
45°	872.0	869.0	884.1	890.1	905.2	923.5	932.5	947.6	953.8	959.8	953.8
47.5°	705.5	717.6	729.6	744.9	756.9	787.2	805.4	820.5	826.6	835.6	835.6
50°	566.1	578.2	599.5	611.6	626.8	663.1	693.4	714.5	726.6	735.8	732.8
52.5°	436.0	457.2	484.5	496.5	517.8	560.1	593.4	617.6	632.8	641.9	644.9
55°	336.1	354.2	381.5	399.6	420.9	466.2	508.6	535.9	551.0	563.1	569.2
57.5°	248.2	269.5	299.8	314.9	339.1	390.6	426.9	460.2	478.4	493.5	496.5
60°	181.6	202.9	230.1	248.2	272.5	324.0	366.4	396.6	417.9	430.0	436.0
62.5°	130.2	151.4	178.6	196.8	218.0	263.4	305.8	336.1	357.2	372.4	381.5
65°	93.9	115.0	142.2	157.5	175.6	218.0	257.4	287.6	308.9	327.0	333.0
67.5°	69.6	84.8	109.0	124.1	142.2	175.6	208.9	236.1	257.4	272.5	278.5
70°	51.5	63.6	84.8	93.9	106.0	136.2	163.5	187.8	205.9	218.0	224.0
72.5°	36.4	45.4	60.5	69.6	78.8	103.0	124.1	142.2	154.4	166.5	172.6
75°	24.2	30.2	42.4	48.5	54.5	72.6	87.8	103.0	112.0	121.1	124.1
77.5°	15.1	21.2	30.2	33.2	39.4	48.5	60.5	69.6	75.8	81.8	87.8
80°	9.1	12.1	18.1	21.2	24.2	33.2	39.4	45.4	51.5	57.5	60.5
82.5°	6.0	9.1	12.1	12.1	15.1	18.1	24.2	30.2	33.2	36.4	39.4
85°	3.0	3.0	6.0	6.0	9.1	9.1	12.1	15.1	18.1	21.2	24.2
87.5°	3.0	3.0	3.0	3.0	6.0	6.0	9.1	9.1	9.1	12.1	12.1
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: P252710

CATALOG NUMBER: LE_6B40D010 EC6B30509050 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6	2140.6
2.5°	2131.5	2140.6	2131.5	2137.6	2134.5	2134.5	2131.5	2134.5
5°	2140.6	2152.8	2140.6	2149.8	2143.6	2143.6	2143.6	2146.6
7.5°	2149.8	2161.8	2152.8	2161.8	2158.8	2155.8	2155.8	2161.8
10°	2158.8	2167.9	2161.8	2170.9	2167.9	2164.9	2164.9	2170.9
12.5°	2158.8	2170.9	2164.9	2173.9	2170.9	2167.9	2167.9	2170.9
15°	2149.8	2164.9	2155.8	2164.9	2161.8	2158.8	2158.8	2164.9
17.5°	2122.5	2134.5	2128.5	2134.5	2134.5	2131.5	2134.5	2137.6
20°	2086.1	2095.2	2089.1	2095.2	2095.2	2089.1	2092.1	2095.2
22.5°	2034.6	2043.8	2037.6	2043.8	2040.8	2037.6	2037.6	2034.6
25°	1971.0	1983.1	1974.1	1980.1	1974.1	1968.0	1968.0	1971.0
27.5°	1892.4	1901.4	1889.2	1895.4	1889.2	1883.2	1883.2	1880.2
30°	1789.4	1792.4	1783.4	1789.4	1783.4	1780.2	1774.2	1774.2
32.5°	1665.2	1668.2	1659.2	1659.2	1653.1	1653.1	1641.0	1650.1
35°	1519.9	1523.0	1519.9	1516.9	1507.9	1504.8	1501.8	1501.8
37.5°	1368.5	1368.5	1359.5	1356.4	1350.4	1344.4	1347.4	1338.2
40°	1214.1	1211.1	1202.0	1205.0	1202.0	1192.9	1189.9	1186.9
42.5°	1068.8	1068.8	1059.8	1062.8	1056.6	1053.6	1044.6	1047.6
45°	941.6	941.6	932.5	932.5	929.5	920.4	923.5	917.4
47.5°	826.6	826.6	823.5	823.5	814.5	811.4	811.4	811.4
50°	726.6	726.6	726.6	726.6	723.6	720.6	717.6	720.6
52.5°	641.9	647.9	644.9	644.9	641.9	638.9	635.9	635.9
55°	566.1	569.2	569.2	572.2	569.2	566.1	569.2	566.1
57.5°	499.6	505.6	505.6	505.6	505.6	505.6	502.6	499.6
60°	442.0	445.1	445.1	448.1	448.1	448.1	445.1	445.1
62.5°	384.5	390.6	393.6	393.6	396.6	393.6	393.6	393.6
65°	339.1	345.1	348.2	345.1	348.2	348.2	345.1	345.1
67.5°	284.6	290.6	290.6	290.6	290.6	293.8	290.6	290.6
70°	230.1	236.1	233.1	236.1	236.1	236.1	236.1	236.1
72.5°	175.6	178.6	181.6	181.6	184.8	181.6	181.6	181.6
75°	127.1	133.2	133.2	133.2	133.2	136.2	136.2	136.2
77.5°	90.9	93.9	93.9	96.9	96.9	96.9	96.9	99.9
80°	63.6	63.6	66.6	66.6	69.6	69.6	69.6	69.6
82.5°	42.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
85°	24.2	27.2	27.2	27.2	27.2	30.2	30.2	30.2
87.5°	15.1	15.1	15.1	15.1	15.1	15.1	12.1	12.1
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)