

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: P252708

Luminaire Tested: **LE_6B40D010 EC6B30509035 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252708
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 EC6B30509035 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE 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: 4223.7 lumens
Efficiency: N/A
Efficacy: 98.2 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

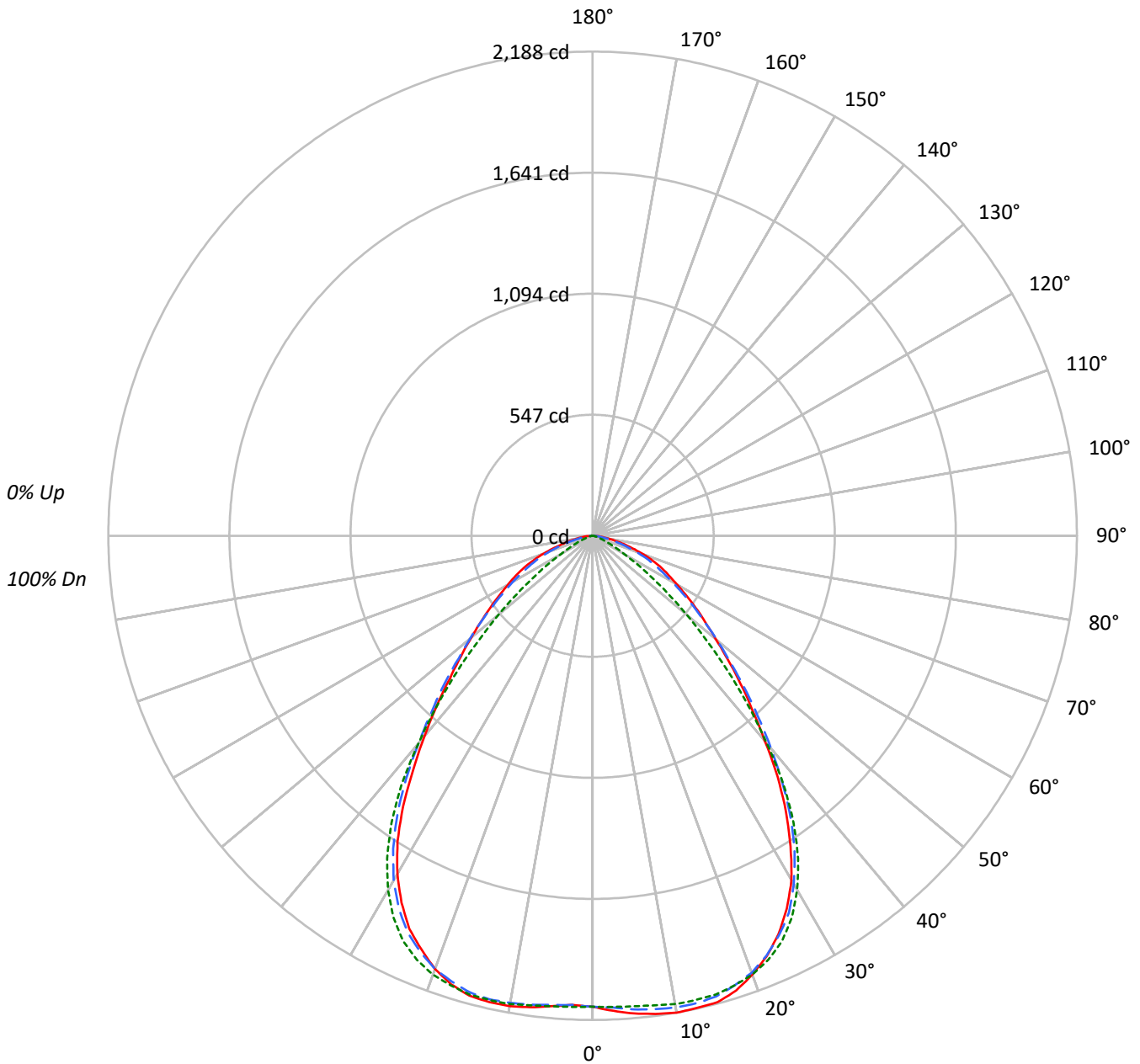
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	138832	138832	138832
5°	141923	139755	139755
10°	144962	142372	142968
15°	147390	144952	145357
20°	146492	146492	144611
25°	142998	145597	141055
30°	135367	139224	132881
35°	121298	126093	118901
40°	103050	104328	100487
45°	87199	79707	84145
50°	73625	56219	72712
55°	64709	36284	64026
60°	57347	21595	57738
65°	52965	12998	52965
70°	45933	7458	44788
75°	36424	4537	34156
80°	27126	3381	25999
85°	24777	2246	22531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.9	4.9
10°-20°	606.4	14.4
20°-30°	911.9	21.6
30°-40°	958.8	22.7
40°-50°	716.3	17.0
50°-60°	445.9	10.6
60°-70°	253.6	6.0
70°-80°	104.4	2.5
80°-90°	21.6	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°	1723.2	40.8
0°-40°	2682.0	63.5
0°-60°	3844.1	91.0
0°-90°	4223.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4223.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2128	2128	2128	2128	2128	
5°	2167	2149	2134	2128	2134	207
15°	2182	2155	2146	2137	2152	614
25°	1986	1993	2023	1978	1960	909
35°	1523	1562	1583	1538	1493	945
45°	945	966	864	948	912	732
55°	569	557	319	548	563	512
65°	343	307	84	307	343	338
75°	144	114	18	111	136	157
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°	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0
2.5°	2149.1	2146.1	2149.1	2143.1	2140.0	2140.0	2143.1	2137.0	2134.0	2137.0	2134.0
5°	2167.1	2161.1	2164.1	2161.1	2155.1	2155.1	2158.1	2149.1	2149.1	2152.1	2149.1
7.5°	2179.1	2179.1	2179.1	2173.1	2170.1	2167.1	2173.1	2164.1	2161.1	2161.1	2158.1
10°	2188.2	2185.2	2188.2	2182.2	2176.1	2173.1	2179.1	2173.1	2167.1	2173.1	2164.1
12.5°	2185.2	2185.2	2185.2	2182.2	2176.1	2173.1	2179.1	2170.1	2167.1	2170.1	2164.1
15°	2182.2	2173.1	2176.1	2173.1	2164.1	2164.1	2167.1	2158.1	2152.1	2161.1	2155.1
17.5°	2155.1	2149.1	2152.1	2146.1	2140.0	2137.0	2140.0	2137.0	2131.0	2137.0	2131.0
20°	2110.0	2110.0	2113.0	2107.0	2100.9	2097.9	2103.9	2097.9	2091.9	2100.9	2100.9
22.5°	2055.8	2055.8	2055.8	2052.8	2049.8	2049.8	2049.8	2046.8	2043.8	2049.8	2052.8
25°	1986.5	1983.5	1986.5	1989.5	1986.5	1983.5	1986.5	1986.5	1980.5	1992.6	1992.6
27.5°	1899.2	1899.2	1905.2	1902.2	1902.2	1899.2	1905.2	1905.2	1902.2	1911.2	1920.4
30°	1796.9	1790.9	1796.9	1796.9	1799.9	1799.9	1803.0	1803.0	1803.0	1812.0	1818.0
32.5°	1664.5	1667.5	1676.5	1673.5	1670.5	1679.5	1679.5	1685.5	1688.6	1694.6	1697.6
35°	1523.0	1526.0	1526.0	1529.0	1535.0	1529.0	1544.1	1541.1	1544.1	1556.1	1562.1
37.5°	1372.5	1363.5	1378.5	1372.5	1375.5	1375.5	1381.5	1384.6	1393.6	1408.6	1408.6
40°	1210.0	1213.0	1219.0	1222.0	1225.0	1225.0	1225.0	1234.1	1237.1	1255.1	1252.1
42.5°	1068.5	1068.5	1074.5	1077.5	1077.5	1077.5	1077.5	1086.6	1092.6	1098.6	1104.6
45°	945.1	936.1	942.1	942.1	948.1	945.1	951.1	957.1	960.1	969.2	966.1
47.5°	827.8	824.8	827.8	830.8	827.8	830.8	833.8	836.8	839.8	839.8	839.8
50°	725.4	725.4	728.4	731.4	731.4	731.4	731.4	734.4	734.4	740.5	734.4
52.5°	641.1	644.1	644.1	641.1	644.1	644.1	647.1	647.1	644.1	644.1	635.1
55°	568.9	565.9	568.9	565.9	568.9	568.9	565.9	565.9	562.9	559.9	556.9
57.5°	499.6	499.6	499.6	499.6	496.6	499.6	496.6	493.6	493.6	487.6	478.6
60°	439.5	439.5	439.5	439.5	439.5	436.5	439.5	436.5	430.4	424.4	412.4
62.5°	388.2	385.2	388.2	385.2	385.2	382.2	382.2	379.2	373.2	367.2	355.1
65°	343.1	346.1	343.1	343.1	340.1	337.1	337.1	334.1	325.1	319.0	307.0
67.5°	295.0	292.0	292.0	292.0	289.0	289.0	289.0	282.9	276.9	267.9	255.9
70°	240.8	240.8	240.8	237.8	237.8	234.8	234.8	231.8	225.8	219.8	204.6
72.5°	189.6	189.6	189.6	183.6	186.6	183.6	183.6	177.6	174.6	165.5	156.5
75°	144.5	144.5	141.5	141.5	138.5	135.5	135.5	132.4	129.4	123.4	114.4
77.5°	105.4	105.4	105.4	102.4	99.4	96.4	96.4	93.2	90.2	87.2	81.2
80°	72.2	72.2	72.2	72.2	69.2	66.2	66.2	63.2	63.2	60.2	54.1
82.5°	48.1	48.1	48.1	48.1	45.1	45.1	45.1	42.1	39.1	39.1	33.1
85°	33.1	33.1	30.1	30.1	30.1	30.1	27.1	27.1	24.1	21.1	21.1
87.5°	18.0	18.0	18.0	18.0	15.0	15.0	15.0	15.0	12.0	12.0	9.0
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°	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0
2.5°	2143.1	2143.1	2140.0	2131.0	2134.0	2131.0	2134.0	2131.0	2122.0	2131.0	2122.0
5°	2155.1	2158.1	2152.1	2140.0	2143.1	2140.0	2140.0	2137.0	2128.0	2134.0	2128.0
7.5°	2167.1	2164.1	2161.1	2149.1	2152.1	2149.1	2149.1	2143.1	2134.0	2140.0	2131.0
10°	2173.1	2173.1	2167.1	2155.1	2155.1	2152.1	2155.1	2152.1	2140.0	2149.1	2143.1
12.5°	2173.1	2170.1	2170.1	2155.1	2158.1	2155.1	2158.1	2152.1	2143.1	2149.1	2146.1
15°	2164.1	2164.1	2161.1	2146.1	2149.1	2149.1	2152.1	2146.1	2137.0	2146.1	2140.0
17.5°	2146.1	2146.1	2143.1	2131.0	2137.0	2137.0	2140.0	2134.0	2125.0	2131.0	2131.0
20°	2110.0	2113.0	2113.0	2103.9	2110.0	2110.0	2113.0	2110.0	2107.0	2110.0	2103.9
22.5°	2067.9	2073.9	2073.9	2064.8	2070.9	2070.9	2079.9	2076.9	2070.9	2073.9	2070.9
25°	2004.6	2010.6	2016.6	2010.6	2016.6	2016.6	2025.6	2022.6	2016.6	2022.6	2013.6
27.5°	1932.4	1935.4	1941.4	1935.4	1944.4	1941.4	1950.4	1947.4	1938.4	1947.4	1944.4
30°	1830.0	1842.1	1851.1	1842.1	1851.1	1851.1	1857.1	1854.1	1851.1	1848.1	1848.1
32.5°	1715.6	1727.8	1727.8	1724.6	1730.8	1730.8	1733.8	1727.8	1724.6	1727.8	1730.8
35°	1574.2	1580.2	1586.2	1583.2	1586.2	1589.2	1586.2	1589.2	1580.2	1583.2	1583.2
37.5°	1420.6	1426.8	1426.8	1417.6	1423.8	1423.8	1417.6	1417.6	1411.6	1417.6	1405.6
40°	1258.1	1252.1	1255.1	1249.1	1243.1	1243.1	1240.1	1228.0	1222.0	1225.0	1228.0
42.5°	1098.6	1098.6	1089.6	1074.5	1059.5	1059.5	1050.5	1044.5	1032.4	1038.4	1035.4
45°	963.1	948.1	936.1	912.0	903.0	897.0	881.9	866.9	860.9	863.9	860.9
47.5°	833.8	821.8	791.6	758.5	749.5	740.5	722.4	704.4	698.2	692.2	692.2
50°	725.4	704.4	671.2	635.1	620.0	605.0	580.9	562.9	550.9	553.9	553.9
52.5°	626.1	602.0	562.9	517.8	499.6	481.6	460.5	439.5	430.4	427.4	427.4
55°	538.8	511.6	472.5	421.4	406.4	385.2	358.1	334.1	322.0	319.0	325.1
57.5°	460.5	436.5	391.2	340.1	322.0	301.0	273.9	252.9	237.8	234.8	237.8
60°	397.2	364.2	325.1	276.9	252.9	234.8	204.6	186.6	171.6	165.5	168.5
62.5°	334.1	304.0	264.9	216.8	198.6	180.6	153.5	132.4	120.4	117.4	120.4
65°	286.0	255.9	219.8	177.6	159.5	141.5	117.4	96.4	87.2	84.2	87.2
67.5°	237.8	210.8	180.6	141.5	126.4	111.4	87.2	72.2	60.2	57.2	60.2
70°	192.6	168.5	138.5	111.4	96.4	84.2	66.2	51.1	42.1	39.1	42.1
72.5°	144.5	126.4	105.4	81.2	72.2	63.2	48.1	36.1	30.1	27.1	30.1
75°	105.4	90.2	75.2	57.2	51.1	45.1	33.1	24.1	21.1	18.0	21.1
77.5°	72.2	63.2	51.1	39.1	33.1	30.1	21.1	18.0	15.0	12.0	12.0
80°	48.1	42.1	33.1	27.1	24.1	21.1	15.0	12.0	9.0	9.0	9.0
82.5°	30.1	24.1	21.1	15.0	12.0	12.0	9.0	6.0	6.0	6.0	6.0
85°	18.0	15.0	12.0	9.0	6.0	6.0	3.0	3.0	3.0	3.0	3.0
87.5°	9.0	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°	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0
2.5°	2128.0	2122.0	2122.0	2125.0	2128.0	2131.0	2125.0	2122.0	2122.0	2131.0	2125.0
5°	2128.0	2125.0	2125.0	2125.0	2131.0	2134.0	2128.0	2125.0	2128.0	2137.0	2134.0
7.5°	2137.0	2131.0	2134.0	2134.0	2137.0	2143.1	2137.0	2134.0	2137.0	2146.1	2140.0
10°	2143.1	2137.0	2140.0	2137.0	2146.1	2149.1	2143.1	2140.0	2143.1	2155.1	2152.1
12.5°	2146.1	2143.1	2143.1	2140.0	2149.1	2152.1	2146.1	2143.1	2146.1	2155.1	2152.1
15°	2140.0	2137.0	2137.0	2137.0	2143.1	2149.1	2140.0	2137.0	2137.0	2146.1	2143.1
17.5°	2128.0	2122.0	2122.0	2122.0	2125.0	2128.0	2119.0	2116.0	2113.0	2122.0	2119.0
20°	2107.0	2100.9	2094.9	2094.9	2097.9	2097.9	2091.9	2082.9	2082.9	2085.9	2079.9
22.5°	2067.9	2064.8	2058.8	2055.8	2061.8	2058.8	2046.8	2037.8	2034.8	2037.8	2031.8
25°	2013.6	2007.6	2004.6	2001.6	2004.6	2001.6	1989.5	1977.5	1977.5	1977.5	1968.5
27.5°	1938.4	1932.4	1929.4	1929.4	1932.4	1926.4	1914.2	1902.2	1896.2	1896.2	1887.2
30°	1842.1	1842.1	1839.1	1836.0	1833.0	1833.0	1815.0	1803.0	1796.9	1799.9	1793.9
32.5°	1724.6	1721.6	1718.6	1709.6	1712.6	1709.6	1694.6	1685.5	1676.5	1670.5	1667.5
35°	1574.2	1574.2	1571.1	1571.1	1571.1	1568.1	1553.1	1544.1	1538.1	1535.0	1526.0
37.5°	1408.6	1405.6	1402.6	1402.6	1402.6	1402.6	1393.6	1384.6	1384.6	1381.5	1375.5
40°	1222.0	1225.0	1228.0	1225.0	1234.1	1243.1	1231.0	1225.0	1222.0	1231.0	1219.0
42.5°	1041.4	1038.4	1053.5	1056.5	1056.5	1071.5	1074.5	1077.5	1074.5	1080.5	1080.5
45°	866.9	863.9	878.9	884.9	900.0	918.0	927.0	942.1	948.1	954.1	948.1
47.5°	701.2	713.4	725.4	740.5	752.5	782.6	800.6	815.8	821.8	830.8	830.8
50°	562.9	574.9	596.0	608.0	623.0	659.1	689.2	710.4	722.4	731.4	728.4
52.5°	433.4	454.5	481.6	493.6	514.8	556.9	590.0	614.0	629.1	638.1	641.1
55°	334.1	352.1	379.2	397.2	418.4	463.5	505.6	532.8	547.8	559.9	565.9
57.5°	246.9	267.9	298.0	313.0	337.1	388.2	424.4	457.5	475.6	490.6	493.6
60°	180.6	201.6	228.8	246.9	270.9	322.0	364.2	394.2	415.4	427.4	433.4
62.5°	129.4	150.5	177.6	195.6	216.8	261.9	304.0	334.1	355.1	370.2	379.2
65°	93.2	114.4	141.5	156.5	174.6	216.8	255.9	286.0	307.0	325.1	331.1
67.5°	69.2	84.2	108.4	123.4	141.5	174.6	207.6	234.8	255.9	270.9	276.9
70°	51.1	63.2	84.2	93.2	105.4	135.5	162.5	186.6	204.6	216.8	222.8
72.5°	36.1	45.1	60.2	69.2	78.2	102.4	123.4	141.5	153.5	165.5	171.6
75°	24.1	30.1	42.1	48.1	54.1	72.2	87.2	102.4	111.4	120.4	123.4
77.5°	15.0	21.1	30.1	33.1	39.1	48.1	60.2	69.2	75.2	81.2	87.2
80°	9.0	12.0	18.0	21.1	24.1	33.1	39.1	45.1	51.1	57.2	60.2
82.5°	6.0	9.0	12.0	12.0	15.0	18.0	24.1	30.1	33.1	36.1	39.1
85°	3.0	3.0	6.0	6.0	9.0	9.0	12.0	15.0	18.0	21.1	24.1
87.5°	3.0	3.0	3.0	3.0	6.0	6.0	9.0	9.0	9.0	12.0	12.0
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: P252708

CATALOG NUMBER: LE_6B40D010 EC6B30509035 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0	2128.0
2.5°	2119.0	2128.0	2119.0	2125.0	2122.0	2122.0	2119.0	2122.0
5°	2128.0	2140.0	2128.0	2137.0	2131.0	2131.0	2131.0	2134.0
7.5°	2137.0	2149.1	2140.0	2149.1	2146.1	2143.1	2143.1	2149.1
10°	2146.1	2155.1	2149.1	2158.1	2155.1	2152.1	2152.1	2158.1
12.5°	2146.1	2158.1	2152.1	2161.1	2158.1	2155.1	2155.1	2158.1
15°	2137.0	2152.1	2143.1	2152.1	2149.1	2146.1	2146.1	2152.1
17.5°	2110.0	2122.0	2116.0	2122.0	2122.0	2119.0	2122.0	2125.0
20°	2073.9	2082.9	2076.9	2082.9	2082.9	2076.9	2079.9	2082.9
22.5°	2022.6	2031.8	2025.6	2031.8	2028.8	2025.6	2025.6	2022.6
25°	1959.5	1971.5	1962.5	1968.5	1962.5	1956.5	1956.5	1959.5
27.5°	1881.2	1890.2	1878.2	1884.2	1878.2	1872.1	1872.1	1869.1
30°	1778.9	1781.9	1772.9	1778.9	1772.9	1769.9	1763.9	1763.9
32.5°	1655.5	1658.5	1649.5	1649.5	1643.4	1643.4	1631.4	1640.4
35°	1511.0	1514.0	1511.0	1508.0	1499.0	1495.9	1492.9	1492.9
37.5°	1360.5	1360.5	1351.5	1348.5	1342.4	1336.4	1339.4	1330.4
40°	1207.0	1204.0	1195.0	1198.0	1195.0	1185.9	1182.9	1179.9
42.5°	1062.5	1062.5	1053.5	1056.5	1050.5	1047.5	1038.4	1041.4
45°	936.1	936.1	927.0	927.0	924.0	915.0	918.0	912.0
47.5°	821.8	821.8	818.8	818.8	809.6	806.6	806.6	806.6
50°	722.4	722.4	722.4	722.4	719.4	716.4	713.4	716.4
52.5°	638.1	644.1	641.1	641.1	638.1	635.1	632.1	632.1
55°	562.9	565.9	565.9	568.9	565.9	562.9	565.9	562.9
57.5°	496.6	502.6	502.6	502.6	502.6	502.6	499.6	496.6
60°	439.5	442.5	442.5	445.5	445.5	445.5	442.5	442.5
62.5°	382.2	388.2	391.2	391.2	394.2	391.2	391.2	391.2
65°	337.1	343.1	346.1	343.1	346.1	346.1	343.1	343.1
67.5°	282.9	289.0	289.0	289.0	289.0	292.0	289.0	289.0
70°	228.8	234.8	231.8	234.8	234.8	234.8	234.8	234.8
72.5°	174.6	177.6	180.6	180.6	183.6	180.6	180.6	180.6
75°	126.4	132.4	132.4	132.4	132.4	135.5	135.5	135.5
77.5°	90.2	93.2	93.2	96.4	96.4	96.4	96.4	99.4
80°	63.2	63.2	66.2	66.2	69.2	69.2	69.2	69.2
82.5°	42.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
85°	24.1	27.1	27.1	27.1	27.1	30.1	30.1	30.1
87.5°	15.0	15.0	15.0	15.0	15.0	15.0	12.0	12.0
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)