

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: P252502

Luminaire Tested: **LE_6B40D010 EC6B30509050 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252502
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 EC6B30509050 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS 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: 3863.7 lumens
Efficiency: N/A
Efficacy: 89.9 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

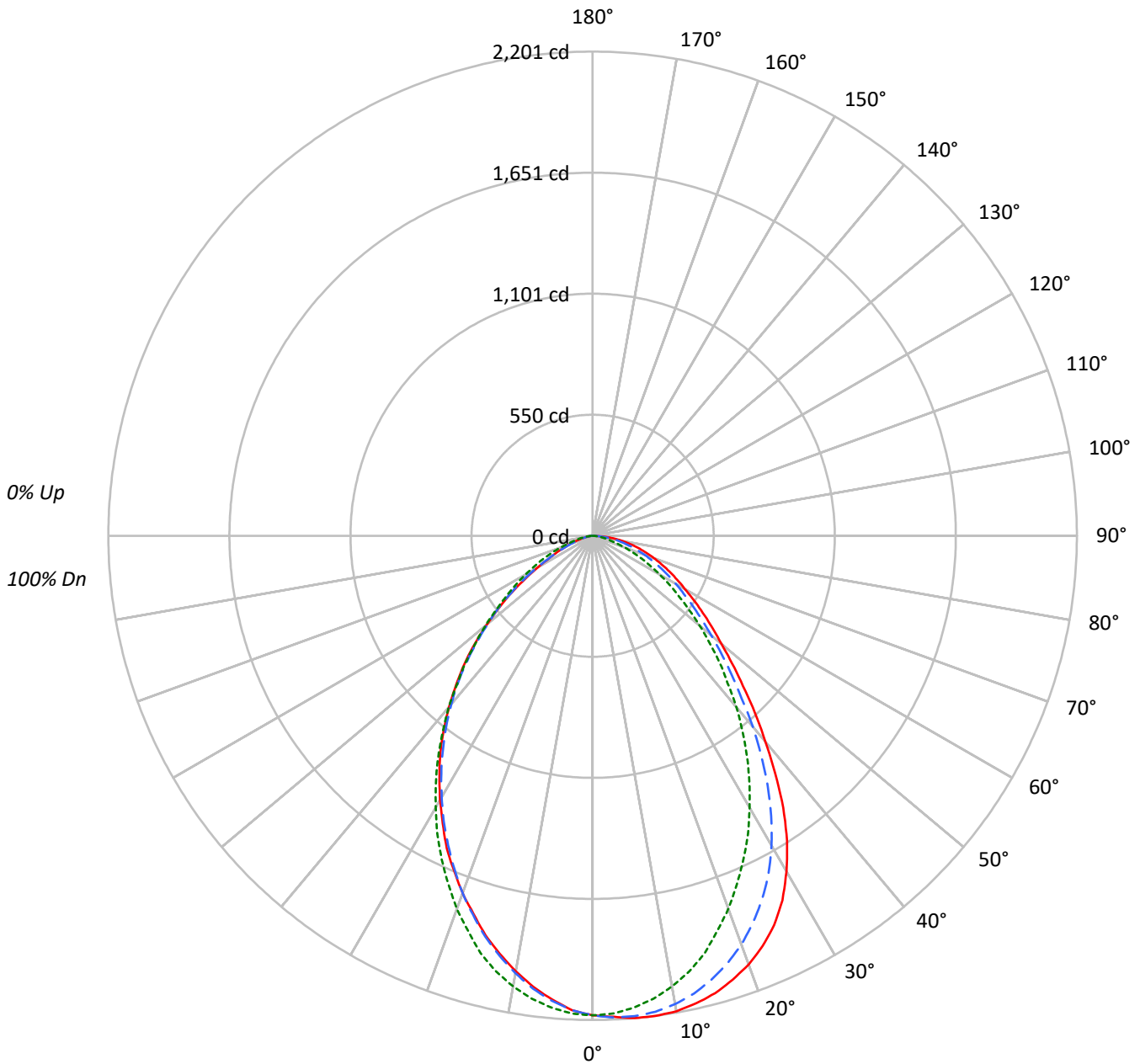
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	142212	142212	142212
5°	144137	140967	138583
10°	145406	137787	133170
15°	145384	132707	126979
20°	143979	125275	120013
25°	140558	116803	112887
30°	132737	107418	104450
35°	120310	97413	96202
40°	103902	86630	86366
45°	89109	75417	75980
50°	77432	64531	63598
55°	69554	54415	50957
60°	63205	45812	37526
65°	59356	37852	27571
70°	56577	29452	20220
75°	54195	21376	13738
80°	51171	14803	9092
85°	45287	9057	4491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.9	5.3
10°-20°	558.4	14.5
20°-30°	775.3	20.1
30°-40°	803.0	20.8
40°-50°	659.9	17.1
50°-60°	453.5	11.7
60°-70°	260.7	6.7
70°-80°	119.9	3.1
80°-90°	29.2	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°	1537.6	39.8
0°-40°	2340.6	60.6
0°-60°	3454.0	89.4
0°-90°	3863.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3863.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2180	2180	2180	2180	2180	
5°	2201	2192	2152	2122	2116	210
15°	2152	2089	1965	1886	1880	606
25°	1953	1822	1623	1553	1568	894
35°	1511	1386	1223	1187	1208	937
45°	966	893	817	808	824	752
55°	612	554	478	451	448	550
65°	384	336	245	172	179	383
75°	215	170	85	54	54	227
85°	60	42	12	6	6	68
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°	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8
2.5°	2188.8	2207.0	2194.9	2191.9	2197.9	2197.9	2197.9	2188.8	2194.9	2185.8	2191.9
5°	2200.9	2216.0	2204.0	2197.9	2204.0	2207.0	2197.9	2191.9	2200.9	2188.8	2191.9
7.5°	2200.9	2216.0	2204.0	2200.9	2204.0	2204.0	2200.9	2188.8	2194.9	2182.8	2182.8
10°	2194.9	2207.0	2194.9	2188.8	2191.9	2188.8	2188.8	2173.6	2176.8	2161.6	2161.6
12.5°	2176.8	2191.9	2176.8	2170.6	2170.6	2170.6	2161.6	2149.5	2152.5	2134.4	2131.2
15°	2152.5	2164.6	2149.5	2143.4	2143.4	2140.4	2134.4	2116.1	2116.1	2098.0	2088.9
17.5°	2116.1	2128.2	2116.1	2107.1	2104.0	2098.0	2091.9	2073.8	2067.8	2046.5	2037.5
20°	2073.8	2082.9	2070.8	2061.6	2055.6	2049.5	2037.5	2019.2	2013.2	1992.0	1976.9
22.5°	2019.2	2031.4	2013.2	2004.1	1998.1	1989.0	1976.9	1958.8	1949.6	1922.4	1904.2
25°	1952.6	1958.8	1943.6	1934.5	1922.4	1916.4	1907.2	1883.0	1874.0	1843.6	1822.5
27.5°	1867.9	1874.0	1855.8	1849.8	1834.6	1828.5	1816.5	1795.2	1783.1	1752.9	1731.6
30°	1762.0	1768.0	1755.9	1746.8	1734.8	1722.6	1713.5	1692.4	1674.1	1643.9	1625.8
32.5°	1643.9	1653.0	1640.9	1628.8	1607.5	1610.6	1595.5	1574.2	1559.1	1531.9	1510.6
35°	1510.6	1516.8	1501.6	1498.5	1486.5	1474.4	1459.2	1444.1	1435.0	1404.8	1386.5
37.5°	1362.4	1377.5	1362.4	1350.2	1344.1	1335.1	1326.0	1304.8	1298.8	1280.6	1256.4
40°	1220.0	1229.1	1220.0	1207.9	1198.9	1198.9	1186.8	1174.6	1159.5	1141.4	1132.2
42.5°	1092.9	1086.9	1083.8	1077.8	1065.6	1062.6	1059.6	1044.5	1035.4	1017.2	1002.1
45°	965.8	968.8	962.8	959.6	950.6	944.5	938.5	926.4	923.4	905.2	893.1
47.5°	859.8	856.8	850.8	850.8	844.6	838.6	832.5	823.5	820.4	805.2	793.1
50°	762.9	765.9	762.9	759.9	750.8	747.8	741.8	735.6	729.6	714.5	702.4
52.5°	684.2	681.1	678.1	678.1	669.0	666.0	660.0	653.9	647.9	632.8	623.6
55°	611.5	611.5	608.5	605.5	596.4	593.4	590.4	584.2	575.2	563.1	554.0
57.5°	544.9	544.9	541.9	538.9	532.9	532.9	526.8	520.8	514.6	502.5	490.5
60°	484.4	487.4	484.4	481.4	475.2	475.2	472.2	463.2	460.1	445.0	436.0
62.5°	432.9	432.9	432.9	429.9	426.9	420.8	420.8	411.8	405.6	396.6	384.5
65°	384.5	384.5	384.5	381.5	375.4	372.4	369.4	363.2	357.2	348.1	336.0
67.5°	339.1	339.1	339.1	336.0	330.0	327.0	323.9	320.9	311.9	302.8	290.6
70°	296.6	296.6	293.6	290.6	287.6	284.6	281.5	275.5	269.5	257.4	248.2
72.5°	254.2	254.2	254.2	248.2	245.2	245.2	239.1	236.1	230.1	218.0	208.9
75°	215.0	211.9	211.9	208.9	205.9	202.9	199.8	196.8	187.8	181.6	169.5
77.5°	175.6	175.6	172.5	169.5	169.5	166.5	163.5	157.4	154.4	145.4	136.2
80°	136.2	136.2	136.2	136.2	133.2	130.1	130.1	124.1	121.1	112.0	106.0
82.5°	102.9	99.9	99.9	99.9	96.9	93.9	93.9	90.9	87.8	81.8	75.6
85°	60.5	57.5	57.5	57.5	54.5	54.5	51.5	51.5	48.5	42.4	42.4
87.5°	18.1	18.1	21.2	21.2	18.1	18.1	18.1	18.1	18.1	15.1	15.1
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°	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8
2.5°	2185.8	2194.9	2182.8	2179.8	2191.9	2185.8	2182.8	2176.8	2179.8	2173.6	2164.6
5°	2182.8	2194.9	2179.8	2170.6	2185.8	2176.8	2170.6	2164.6	2164.6	2152.5	2146.4
7.5°	2173.6	2179.8	2164.6	2155.5	2164.6	2155.5	2149.5	2140.4	2137.4	2122.2	2113.1
10°	2149.5	2155.5	2137.4	2125.2	2134.4	2122.2	2113.1	2104.0	2098.0	2079.9	2067.8
12.5°	2116.1	2119.1	2098.0	2082.9	2088.9	2079.9	2064.6	2052.6	2046.5	2028.4	2013.2
15°	2070.8	2073.8	2049.5	2028.4	2034.4	2022.2	2004.1	1992.0	1983.0	1964.8	1943.6
17.5°	2016.2	2013.2	1986.0	1964.8	1967.8	1952.6	1934.5	1916.4	1904.2	1883.0	1867.9
20°	1955.8	1946.6	1916.4	1892.1	1895.1	1877.0	1855.8	1837.6	1822.5	1804.4	1783.1
22.5°	1880.0	1867.9	1840.6	1810.4	1813.4	1798.2	1768.0	1752.9	1737.8	1713.5	1695.4
25°	1798.2	1780.1	1752.9	1722.6	1722.6	1704.4	1680.2	1662.0	1646.9	1622.6	1601.5
27.5°	1701.4	1692.4	1656.0	1631.8	1628.8	1610.6	1589.4	1568.2	1550.0	1528.9	1507.6
30°	1595.5	1580.2	1553.0	1525.8	1519.8	1504.6	1483.4	1459.2	1447.1	1425.9	1407.8
32.5°	1483.4	1468.2	1438.0	1410.8	1407.8	1395.6	1377.5	1353.2	1341.1	1326.0	1313.9
35°	1356.2	1350.2	1320.0	1298.8	1298.8	1286.6	1268.5	1247.2	1238.2	1223.1	1207.9
37.5°	1235.1	1226.1	1198.9	1180.6	1180.6	1165.5	1147.4	1138.2	1129.2	1117.1	1108.0
40°	1108.0	1102.0	1080.8	1062.6	1065.6	1053.5	1041.4	1029.4	1023.2	1017.2	1008.1
42.5°	990.0	983.9	968.8	953.6	953.6	944.5	932.5	923.4	917.2	908.2	905.2
45°	884.0	874.9	862.8	847.6	847.6	838.6	832.5	826.5	823.5	817.4	808.4
47.5°	781.1	775.0	762.9	747.8	747.8	747.8	735.6	726.6	726.6	720.5	717.5
50°	693.2	684.2	675.1	663.0	663.0	657.0	647.9	638.8	638.8	635.8	629.8
52.5°	611.5	605.5	593.4	581.2	581.2	575.2	566.1	563.1	560.1	551.0	548.0
55°	541.9	535.9	526.8	511.6	508.6	505.6	496.5	490.5	487.4	478.4	478.4
57.5°	478.4	472.2	457.1	448.0	445.0	439.0	429.9	423.9	420.8	414.8	408.8
60°	423.9	414.8	402.6	390.5	387.5	381.5	372.4	366.4	363.2	351.1	345.1
62.5°	372.4	363.2	351.1	339.1	336.0	330.0	317.9	311.9	305.8	293.6	287.6
65°	323.9	314.9	302.8	290.6	284.6	281.5	269.5	260.4	254.2	245.2	233.1
67.5°	278.5	269.5	257.4	242.2	242.2	233.1	224.0	215.0	205.9	196.8	187.8
70°	236.1	227.0	215.0	202.9	199.8	193.8	184.6	172.5	166.5	154.4	145.4
72.5°	196.8	187.8	175.6	163.5	160.5	154.4	145.4	133.2	124.1	115.0	106.0
75°	160.5	151.4	139.2	130.1	127.1	121.1	112.0	99.9	90.9	84.8	75.6
77.5°	127.1	118.1	109.0	99.9	96.9	90.9	81.8	75.6	66.6	60.5	51.5
80°	96.9	90.9	81.8	75.6	72.6	66.6	60.5	51.5	45.4	39.4	36.4
82.5°	69.6	63.6	57.5	48.5	48.5	42.4	39.4	33.2	27.2	24.2	21.2
85°	39.4	33.2	30.2	27.2	24.2	24.2	21.2	18.1	15.1	12.1	12.1
87.5°	12.1	12.1	9.1	9.1	9.1	9.1	6.0	6.0	6.0	6.0	6.0
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°	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8
2.5°	2164.6	2167.6	2161.6	2167.6	2161.6	2164.6	2158.5	2164.6	2158.5	2164.6	2152.5
5°	2143.4	2143.4	2134.4	2140.4	2134.4	2137.4	2125.2	2128.2	2122.2	2128.2	2116.1
7.5°	2107.1	2110.1	2095.0	2101.0	2091.9	2091.9	2082.9	2085.9	2076.8	2079.9	2070.8
10°	2064.6	2061.6	2046.5	2052.6	2040.5	2040.5	2031.4	2031.4	2019.2	2022.2	2010.2
12.5°	2004.1	2001.1	1983.0	1989.0	1976.9	1976.9	1967.8	1967.8	1955.8	1961.8	1949.6
15°	1934.5	1931.5	1913.4	1916.4	1904.2	1904.2	1892.1	1895.1	1886.1	1892.1	1880.0
17.5°	1855.8	1852.8	1834.6	1837.6	1822.5	1825.5	1816.5	1813.4	1807.4	1810.4	1801.2
20°	1774.0	1768.0	1749.9	1752.9	1746.8	1737.8	1731.6	1734.8	1728.6	1734.8	1725.6
22.5°	1689.2	1677.1	1662.0	1662.0	1656.0	1656.0	1646.9	1653.0	1640.9	1649.9	1643.9
25°	1592.4	1583.4	1571.2	1577.2	1565.1	1565.1	1556.1	1559.1	1553.0	1559.1	1553.0
27.5°	1498.5	1492.5	1474.4	1480.4	1471.4	1474.4	1465.2	1468.2	1465.2	1471.4	1465.2
30°	1398.6	1395.6	1383.5	1383.5	1380.5	1377.5	1374.5	1374.5	1371.4	1380.5	1374.5
32.5°	1304.8	1295.8	1283.6	1292.8	1277.5	1286.6	1280.6	1286.6	1280.6	1286.6	1283.6
35°	1207.9	1204.9	1189.8	1192.8	1189.8	1189.8	1186.8	1186.8	1186.8	1195.9	1195.9
37.5°	1105.0	1102.0	1092.9	1095.9	1089.9	1086.9	1086.9	1092.9	1092.9	1099.0	1099.0
40°	1005.1	1008.1	999.0	999.0	996.0	996.0	996.0	1002.1	999.0	1005.1	1002.1
42.5°	905.2	905.2	896.1	899.1	896.1	899.1	899.1	905.2	905.2	908.2	905.2
45°	811.4	811.4	808.4	811.4	805.2	808.4	805.2	811.4	808.4	811.4	811.4
47.5°	717.5	717.5	717.5	714.5	714.5	714.5	714.5	714.5	711.5	717.5	714.5
50°	629.8	632.8	629.8	629.8	626.6	629.8	626.6	626.6	620.6	623.6	623.6
52.5°	551.0	551.0	544.9	544.9	544.9	541.9	541.9	541.9	538.9	538.9	532.9
55°	475.2	475.2	469.2	469.2	466.2	463.2	460.1	460.1	451.1	451.1	442.0
57.5°	405.6	402.6	393.5	393.5	387.5	384.5	381.5	378.4	372.4	366.4	363.2
60°	342.1	336.0	330.0	327.0	320.9	314.9	308.8	302.8	296.6	293.6	290.6
62.5°	281.5	272.5	266.4	263.4	257.4	248.2	242.2	236.1	230.1	227.0	221.0
65°	227.0	218.0	208.9	205.9	199.8	193.8	184.6	178.6	172.5	169.5	169.5
67.5°	178.6	169.5	157.4	157.4	151.4	145.4	139.2	133.2	130.1	133.2	133.2
70°	133.2	127.1	118.1	115.0	109.0	102.9	99.9	99.9	99.9	102.9	99.9
72.5°	99.9	90.9	84.8	81.8	78.8	75.6	75.6	75.6	72.6	75.6	75.6
75°	69.6	63.6	57.5	57.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
77.5°	48.5	42.4	39.4	39.4	39.4	36.4	36.4	36.4	36.4	36.4	36.4
80°	30.2	30.2	27.2	27.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
82.5°	18.1	18.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
85°	9.1	9.1	9.1	9.1	9.1	6.0	6.0	6.0	6.0	6.0	6.0
87.5°	3.0	3.0	3.0	3.0	3.0	6.0	6.0	6.0	6.0	6.0	6.0
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: P252502

CATALOG NUMBER: LE_6B40D010 EC6B30509050 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8	2179.8
2.5°	2152.5	2161.6	2149.5	2158.5	2155.5	2152.5	2146.4	2158.5
5°	2116.1	2119.1	2107.1	2119.1	2116.1	2110.1	2104.0	2116.1
7.5°	2064.6	2073.8	2058.6	2070.8	2067.8	2061.6	2055.6	2067.8
10°	2007.1	2016.2	2004.1	2013.2	2013.2	2007.1	1998.1	2010.2
12.5°	1943.6	1949.6	1937.5	1949.6	1946.6	1940.6	1937.5	1946.6
15°	1874.0	1883.0	1870.9	1880.0	1877.0	1874.0	1870.9	1880.0
17.5°	1798.2	1807.4	1798.2	1807.4	1807.4	1798.2	1795.2	1801.2
20°	1722.6	1728.6	1719.5	1728.6	1725.6	1725.6	1719.5	1728.6
22.5°	1637.9	1646.9	1640.9	1646.9	1643.9	1643.9	1640.9	1646.9
25°	1553.0	1562.1	1553.0	1562.1	1559.1	1559.1	1553.0	1568.2
27.5°	1468.2	1474.4	1465.2	1477.4	1474.4	1468.2	1471.4	1474.4
30°	1377.5	1383.5	1377.5	1386.5	1386.5	1386.5	1380.5	1386.5
32.5°	1286.6	1295.8	1286.6	1295.8	1292.8	1292.8	1289.6	1295.8
35°	1195.9	1198.9	1192.8	1201.9	1201.9	1204.9	1198.9	1207.9
37.5°	1102.0	1105.0	1102.0	1105.0	1111.0	1102.0	1108.0	1111.0
40°	1005.1	1011.1	1008.1	1011.1	1011.1	1014.1	1011.1	1014.1
42.5°	908.2	914.2	908.2	917.2	914.2	914.2	917.2	917.2
45°	808.4	817.4	811.4	817.4	820.4	817.4	817.4	823.5
47.5°	714.5	720.5	717.5	720.5	720.5	720.5	720.5	726.6
50°	620.6	623.6	623.6	626.6	626.6	629.8	623.6	626.6
52.5°	526.8	532.9	532.9	532.9	529.8	532.9	532.9	532.9
55°	442.0	445.0	439.0	445.0	445.0	442.0	442.0	448.0
57.5°	360.2	360.2	360.2	360.2	360.2	357.2	360.2	360.2
60°	284.6	287.6	284.6	284.6	284.6	284.6	281.5	287.6
62.5°	221.0	221.0	218.0	221.0	221.0	221.0	224.0	224.0
65°	172.5	175.6	172.5	175.6	175.6	175.6	175.6	178.6
67.5°	136.2	136.2	136.2	136.2	136.2	136.2	136.2	136.2
70°	102.9	102.9	102.9	106.0	102.9	102.9	102.9	106.0
72.5°	75.6	75.6	75.6	75.6	75.6	75.6	78.8	78.8
75°	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
77.5°	36.4	36.4	36.4	39.4	36.4	39.4	36.4	36.4
80°	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
82.5°	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
85°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
87.5°	6.0	6.0	6.0	6.0	3.0	3.0	3.0	3.0
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)