

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: P252393

Luminaire Tested: **LE\_6B40D010 EC6B30509024 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252393  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B40D010 EC6B30509024 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3412.5 lumens  
Efficiency: N/A  
Efficacy: 79.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

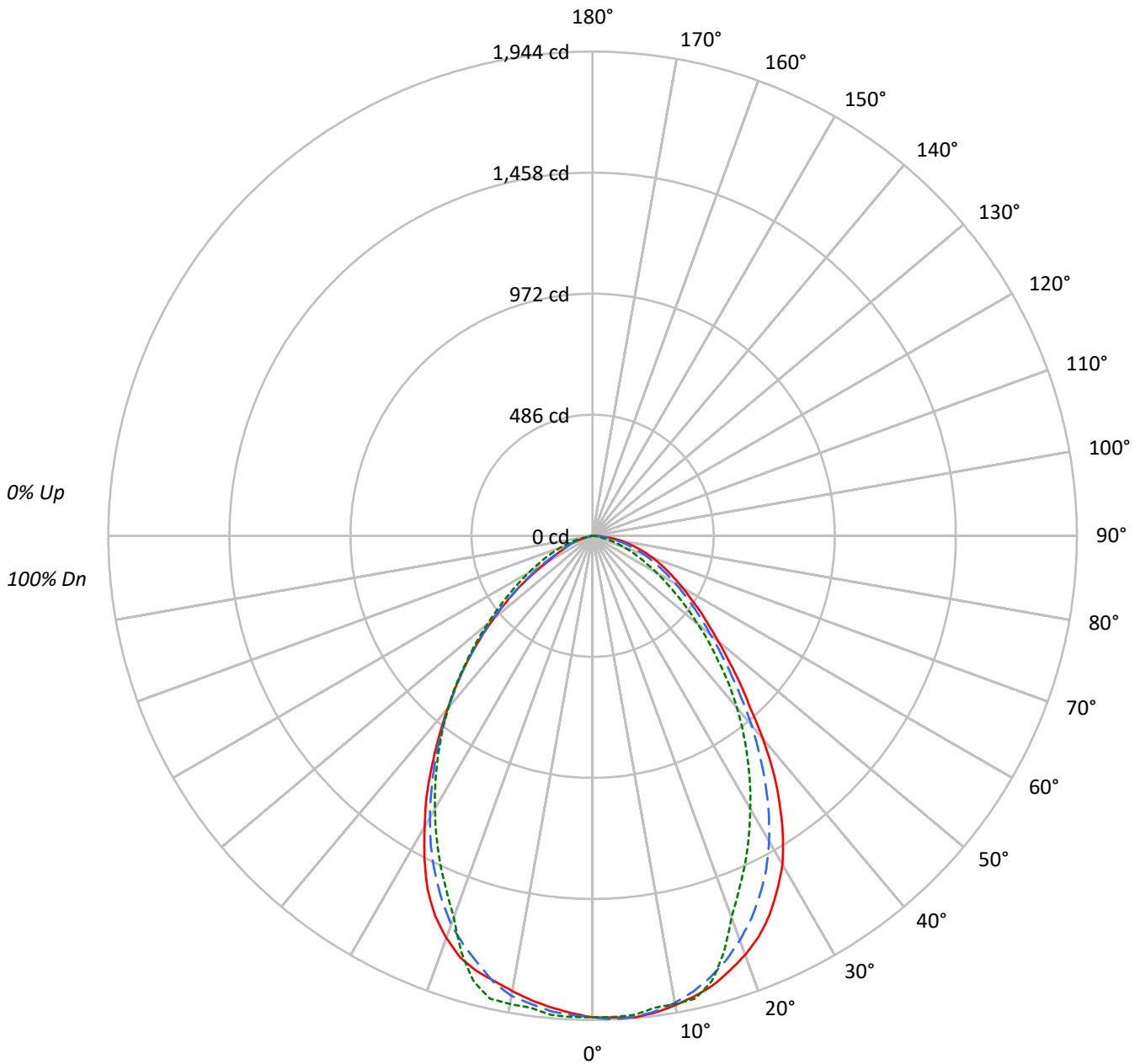
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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								
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77								
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68								
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60								
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54								
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48								
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44								
8	67	55	47	42	66	54	47	42	53	46	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	40	35	45	39	35	44	39	35	33								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	126143	126143	126143
5°	127122	126461	124490
10°	126764	126433	122941
15°	126182	124993	122116
20°	124303	113153	119249
25°	120928	104299	112793
30°	114823	95342	101587
35°	104190	86191	89401
40°	90463	76777	76990
45°	77151	66024	65332
50°	66774	55813	52758
55°	59704	46544	40845
60°	54398	38649	27518
65°	50789	31785	20547
70°	48374	25866	17244
75°	45574	18376	5697
80°	43394	9430	1879
85°	35781	5614	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.6	5.4
10°-20°	510.7	15.0
20°-30°	704.9	20.7
30°-40°	717.3	21.0
40°-50°	576.5	16.9
50°-60°	383.3	11.2
60°-70°	218.4	6.4
70°-80°	98.1	2.9
80°-90°	20.7	0.6
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°	1398.2	41.0
0°-40°	2115.5	62.0
0°-60°	3075.3	90.1
0°-90°	3412.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3412.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1934	1934	1934	1934	1934	
5°	1941	1939	1931	1916	1901	184
15°	1868	1833	1851	1778	1808	526
25°	1680	1590	1449	1497	1567	770
35°	1308	1208	1082	1102	1122	813
45°	836	786	716	708	708	648
55°	525	490	409	364	359	472
65°	329	294	206	133	133	328
75°	181	151	73	30	23	193
85°	48	33	8	2	0	57
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°	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5
2.5°	1936.0	1946.1	1943.6	1941.1	1943.6	1941.1	1936.0	1936.0	1931.0	1931.0	1943.6
5°	1941.1	1946.1	1943.6	1941.1	1941.1	1943.6	1933.5	1933.5	1928.5	1926.0	1938.6
7.5°	1931.0	1938.6	1933.5	1933.5	1931.0	1933.5	1923.5	1923.5	1916.0	1913.5	1926.0
10°	1913.5	1923.5	1918.5	1918.5	1918.5	1913.5	1908.5	1905.9	1898.4	1895.9	1903.4
12.5°	1893.4	1900.9	1898.4	1893.4	1893.4	1893.4	1883.4	1880.9	1870.8	1865.8	1873.2
15°	1868.2	1873.2	1870.8	1868.2	1863.2	1863.2	1853.2	1848.1	1838.1	1828.1	1833.1
17.5°	1830.6	1838.1	1833.1	1830.6	1823.0	1823.0	1813.0	1808.0	1792.9	1782.9	1785.4
20°	1790.4	1792.9	1790.4	1785.4	1777.9	1775.4	1765.2	1755.2	1742.8	1730.1	1727.6
22.5°	1742.8	1745.2	1737.6	1732.6	1725.1	1722.6	1710.1	1702.5	1682.5	1667.4	1664.9
25°	1679.9	1682.5	1682.5	1669.9	1664.9	1659.9	1647.2	1634.8	1617.1	1597.1	1589.5
27.5°	1604.6	1612.1	1607.1	1594.5	1584.5	1582.0	1569.5	1559.4	1536.8	1519.2	1509.1
30°	1524.2	1521.8	1519.2	1511.6	1496.6	1494.1	1481.5	1469.0	1451.4	1428.9	1416.2
32.5°	1421.2	1421.2	1418.8	1411.2	1396.1	1391.1	1381.1	1366.0	1346.0	1328.4	1315.9
35°	1308.2	1310.8	1308.2	1293.2	1283.1	1278.1	1273.1	1255.5	1238.0	1217.9	1207.9
37.5°	1190.2	1182.8	1185.2	1172.6	1160.1	1165.1	1150.1	1142.5	1122.5	1107.4	1097.4
40°	1062.2	1067.2	1057.1	1052.1	1044.6	1037.1	1037.1	1024.5	1014.5	996.9	991.9
42.5°	936.6	944.1	941.6	936.6	926.6	929.1	916.5	911.5	899.0	891.5	883.9
45°	836.2	836.2	836.2	831.1	828.6	823.6	816.1	808.6	801.0	791.0	786.0
47.5°	738.2	738.2	740.8	735.8	730.8	728.2	723.2	723.2	710.6	700.6	695.6
50°	657.9	657.9	657.9	652.9	647.9	647.9	642.9	637.9	630.2	622.8	617.8
52.5°	585.1	585.1	585.1	580.1	577.5	575.0	572.5	570.0	560.0	555.0	549.9
55°	524.9	522.2	522.2	519.8	514.8	514.8	512.2	507.2	499.8	492.1	489.6
57.5°	464.5	467.1	464.5	464.5	459.5	459.5	454.5	452.0	444.5	439.5	434.4
60°	416.9	416.9	416.9	414.4	409.2	411.9	406.8	404.2	396.8	389.2	384.2
62.5°	369.1	371.6	371.6	369.1	364.1	364.1	361.6	359.1	351.5	344.0	336.5
65°	329.0	329.0	329.0	326.5	323.9	323.9	321.4	318.9	311.4	301.4	293.8
67.5°	291.2	288.8	288.8	288.8	286.2	283.8	281.2	278.8	271.2	263.6	253.6
70°	253.6	253.6	253.6	251.1	246.1	248.6	246.1	243.6	236.0	228.5	221.0
72.5°	218.5	218.5	216.0	213.5	213.5	210.9	210.9	208.4	200.9	190.9	183.2
75°	180.8	180.8	180.8	180.8	175.8	178.2	173.2	170.8	165.8	158.2	150.6
77.5°	148.1	148.1	148.1	145.6	143.1	143.1	140.6	138.1	130.6	125.5	115.5
80°	115.5	115.5	115.5	115.5	113.0	110.5	108.0	105.5	100.5	92.9	85.4
82.5°	85.4	85.4	82.9	82.9	82.9	80.4	77.9	75.4	70.2	65.2	60.2
85°	47.8	50.2	50.2	45.2	47.8	45.2	45.2	40.1	40.1	35.1	32.6
87.5°	17.6	15.1	15.1	15.1	15.1	15.1	15.1	12.5	12.5	12.5	10.0
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°	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5
2.5°	1933.5	1931.0	1941.1	1941.1	1926.0	1933.5	1936.0	1931.0	1931.0	1933.5	1926.0
5°	1928.5	1923.5	1933.5	1936.0	1921.0	1928.5	1931.0	1926.0	1928.5	1931.0	1921.0
7.5°	1911.0	1911.0	1918.5	1921.0	1905.9	1913.5	1913.5	1908.5	1911.0	1911.0	1903.4
10°	1893.4	1885.9	1893.4	1893.4	1880.9	1883.4	1888.4	1885.9	1895.9	1908.5	1908.5
12.5°	1860.8	1853.2	1865.8	1865.8	1858.2	1868.2	1880.9	1888.4	1898.4	1903.4	1888.4
15°	1820.5	1823.0	1845.6	1863.2	1855.8	1870.8	1883.4	1878.2	1865.8	1850.6	1828.1
17.5°	1767.9	1760.2	1780.4	1790.4	1780.4	1785.4	1795.5	1785.4	1765.2	1752.8	1722.6
20°	1707.5	1687.5	1687.5	1682.5	1664.9	1664.9	1662.4	1644.8	1637.2	1629.8	1617.1
22.5°	1639.8	1617.1	1609.6	1594.5	1579.5	1577.0	1569.5	1551.9	1541.9	1536.8	1521.8
25°	1561.9	1541.9	1529.2	1514.2	1491.6	1486.6	1479.0	1461.5	1456.5	1448.9	1436.4
27.5°	1481.5	1456.5	1438.9	1423.8	1403.8	1401.2	1386.1	1373.6	1363.5	1358.5	1348.5
30°	1388.6	1361.0	1348.5	1328.4	1313.2	1308.2	1295.8	1278.1	1270.6	1265.6	1258.1
32.5°	1285.6	1263.1	1250.5	1233.0	1212.9	1215.4	1200.2	1185.2	1180.2	1175.2	1167.6
35°	1185.2	1162.6	1147.6	1132.5	1120.0	1114.9	1104.9	1092.4	1084.8	1082.2	1077.2
37.5°	1074.8	1057.1	1044.6	1029.5	1019.5	1014.5	1009.5	996.9	991.9	991.9	981.9
40°	966.8	951.8	941.6	934.1	921.6	919.1	914.0	906.5	904.0	901.5	894.0
42.5°	868.9	848.8	841.2	836.2	828.6	823.6	821.1	816.1	813.6	811.1	803.5
45°	775.9	758.4	750.9	745.8	738.2	735.8	733.2	725.8	720.6	715.6	713.1
47.5°	685.5	673.0	670.5	657.9	652.9	647.9	642.9	637.9	635.2	632.8	622.8
50°	607.6	600.1	587.6	580.1	575.0	572.5	562.5	555.0	552.5	549.9	542.4
52.5°	537.4	527.4	519.8	507.2	504.8	499.8	494.8	484.6	479.6	477.1	469.6
55°	474.6	467.1	457.0	447.0	439.5	436.9	429.4	419.4	414.4	409.2	404.2
57.5°	421.9	409.2	399.2	389.2	384.2	376.6	369.1	364.1	356.6	349.0	341.5
60°	371.6	361.6	349.0	339.0	334.0	329.0	318.9	311.4	303.9	296.2	288.8
62.5°	323.9	313.9	301.4	291.2	286.2	281.2	271.2	263.6	256.1	248.6	238.5
65°	281.2	271.2	261.1	251.1	246.1	241.1	231.0	221.0	213.5	205.9	195.9
67.5°	246.1	233.5	223.5	213.5	208.4	203.4	193.4	185.9	175.8	168.2	158.2
70°	208.4	198.4	190.9	180.8	175.8	170.8	160.8	150.6	143.1	135.6	125.5
72.5°	175.8	163.2	155.8	145.6	140.6	138.1	128.1	120.5	113.0	103.0	95.4
75°	140.6	130.6	120.5	113.0	108.0	105.5	95.4	87.9	80.4	72.9	65.2
77.5°	108.0	100.5	90.4	82.9	77.9	75.4	65.2	57.8	50.2	45.2	37.6
80°	80.4	70.2	65.2	57.8	55.2	50.2	45.2	37.6	32.6	25.1	20.1
82.5°	55.2	47.8	42.8	37.6	35.1	32.6	27.6	22.6	17.6	15.1	12.5
85°	30.1	25.1	22.6	20.1	17.6	17.6	15.1	12.5	10.0	7.5	5.0
87.5°	10.0	7.5	7.5	7.5	7.5	5.0	5.0	5.0	2.5	2.5	2.5
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°	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5
2.5°	1931.0	1931.0	1931.0	1928.5	1928.5	1928.5	1926.0	1936.0	1926.0	1923.5	1931.0
5°	1928.5	1923.5	1923.5	1923.5	1923.5	1921.0	1918.5	1923.5	1916.0	1913.5	1913.5
7.5°	1913.5	1911.0	1911.0	1908.5	1905.9	1903.4	1900.9	1903.4	1895.9	1893.4	1893.4
10°	1916.0	1911.0	1911.0	1903.4	1898.4	1890.9	1883.4	1885.9	1875.8	1868.2	1868.2
12.5°	1885.9	1873.2	1865.8	1858.2	1853.2	1850.6	1840.6	1845.6	1835.6	1833.1	1833.1
15°	1818.0	1803.0	1790.4	1785.4	1785.4	1780.4	1772.9	1782.9	1777.9	1780.4	1792.9
17.5°	1712.6	1705.0	1697.5	1695.0	1697.5	1702.5	1707.5	1722.6	1722.6	1730.1	1742.8
20°	1619.6	1614.6	1619.6	1619.6	1622.1	1632.2	1642.2	1654.9	1659.9	1667.4	1685.0
22.5°	1529.2	1529.2	1534.2	1541.9	1539.2	1556.9	1559.4	1582.0	1582.0	1597.1	1612.1
25°	1441.4	1441.4	1446.4	1448.9	1453.9	1464.0	1474.0	1491.6	1496.6	1511.6	1524.2
27.5°	1356.0	1353.5	1353.5	1356.0	1361.0	1373.6	1378.6	1398.6	1406.2	1416.2	1428.9
30°	1260.6	1258.1	1263.1	1268.1	1265.6	1278.1	1285.6	1300.8	1305.8	1315.9	1325.9
32.5°	1170.1	1170.1	1170.1	1175.2	1175.2	1185.2	1185.2	1202.9	1202.9	1210.4	1220.4
35°	1077.2	1077.2	1079.8	1082.2	1084.8	1087.2	1089.9	1099.9	1102.4	1104.9	1109.9
37.5°	989.4	986.9	989.4	989.4	984.4	994.4	994.4	1004.5	996.9	1004.5	1007.0
40°	899.0	899.0	896.5	896.5	896.5	901.5	896.5	904.0	899.0	904.0	901.5
42.5°	806.1	806.1	801.0	806.1	803.5	803.5	803.5	808.6	801.0	806.1	808.6
45°	713.1	710.6	710.6	708.1	708.1	708.1	710.6	710.6	708.1	713.1	713.1
47.5°	622.8	620.2	620.2	620.2	620.2	622.8	615.2	620.2	615.2	615.2	615.2
50°	544.9	542.4	539.9	537.4	534.9	534.9	532.4	532.4	527.4	524.9	522.2
52.5°	469.6	467.1	462.0	462.0	459.5	457.0	449.5	449.5	442.0	439.5	439.5
55°	401.8	394.2	391.8	386.8	386.8	381.8	376.6	371.6	364.1	359.1	359.1
57.5°	339.0	331.5	326.5	323.9	321.4	316.4	306.4	303.9	293.8	291.2	288.8
60°	283.8	276.2	268.8	263.6	261.1	253.6	243.6	238.5	233.5	226.0	218.5
62.5°	231.0	223.5	213.5	210.9	205.9	198.4	190.9	183.2	178.2	170.8	165.8
65°	185.9	178.2	170.8	165.8	160.8	153.1	145.6	138.1	133.1	130.6	128.1
67.5°	150.6	140.6	133.1	130.6	125.5	120.5	113.0	110.5	105.5	105.5	105.5
70°	118.0	110.5	103.0	100.5	97.9	92.9	87.9	87.9	87.9	87.9	87.9
72.5°	87.9	82.9	75.4	72.9	70.2	67.8	62.8	65.2	62.8	62.8	62.8
75°	55.2	50.2	45.2	42.8	40.1	37.6	35.1	32.6	30.1	27.6	27.6
77.5°	30.1	25.1	22.6	20.1	20.1	17.6	15.1	15.1	12.5	12.5	12.5
80°	17.6	15.1	12.5	10.0	10.0	7.5	7.5	7.5	7.5	5.0	5.0
82.5°	10.0	7.5	5.0	5.0	5.0	5.0	2.5	2.5	2.5	2.5	2.5
85°	5.0	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0
87.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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: P252393

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5	1933.5
2.5°	1918.5	1926.0	1918.5	1926.0	1926.0	1926.0	1926.0	1918.5
5°	1905.9	1911.0	1903.4	1908.5	1911.0	1908.5	1908.5	1900.9
7.5°	1883.4	1888.4	1880.9	1888.4	1890.9	1888.4	1885.9	1880.9
10°	1860.8	1863.2	1855.8	1860.8	1865.8	1865.8	1863.2	1855.8
12.5°	1825.6	1833.1	1825.6	1830.6	1835.6	1838.1	1838.1	1830.6
15°	1785.4	1798.0	1792.9	1800.5	1808.0	1810.5	1810.5	1808.0
17.5°	1745.2	1757.8	1750.2	1762.8	1770.4	1775.4	1777.9	1772.9
20°	1687.5	1702.5	1697.5	1707.5	1717.6	1725.1	1725.1	1717.6
22.5°	1612.1	1632.2	1629.8	1637.2	1649.8	1652.2	1657.4	1652.2
25°	1529.2	1544.4	1541.9	1549.4	1564.4	1564.4	1566.9	1566.9
27.5°	1433.9	1448.9	1446.4	1451.4	1461.5	1464.0	1466.5	1461.5
30°	1330.9	1338.4	1338.4	1346.0	1353.5	1356.0	1356.0	1348.5
32.5°	1217.9	1227.9	1233.0	1230.5	1238.0	1243.0	1240.5	1240.5
35°	1114.9	1117.5	1120.0	1122.5	1125.0	1130.0	1125.0	1122.5
37.5°	1004.5	1012.0	1007.0	1012.0	1017.0	1014.5	1012.0	1012.0
40°	904.0	906.5	901.5	906.5	909.0	909.0	909.0	904.0
42.5°	803.5	808.6	803.5	808.6	808.6	808.6	808.6	806.1
45°	703.1	708.1	708.1	710.6	710.6	708.1	708.1	708.1
47.5°	610.2	615.2	610.2	615.2	617.8	612.8	612.8	612.8
50°	522.2	519.8	519.8	522.2	522.2	522.2	522.2	519.8
52.5°	431.9	434.4	434.4	434.4	436.9	434.4	436.9	436.9
55°	354.1	354.1	354.1	356.6	354.1	354.1	356.6	359.1
57.5°	283.8	281.2	278.8	278.8	281.2	278.8	278.8	278.8
60°	218.5	216.0	213.5	213.5	213.5	213.5	213.5	210.9
62.5°	163.2	163.2	163.2	165.8	165.8	165.8	165.8	168.2
65°	130.6	130.6	130.6	130.6	130.6	130.6	130.6	133.1
67.5°	105.5	105.5	105.5	108.0	108.0	108.0	108.0	108.0
70°	87.9	87.9	90.4	87.9	90.4	90.4	90.4	90.4
72.5°	60.2	60.2	60.2	60.2	60.2	57.8	60.2	57.8
75°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	22.6
77.5°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0
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)