

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: P252497

Luminaire Tested: **LE_6B40D010 EC6B30509024 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252497
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 EC6B30509024 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS 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: 3203.7 lumens
Efficiency: N/A
Efficacy: 74.5 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

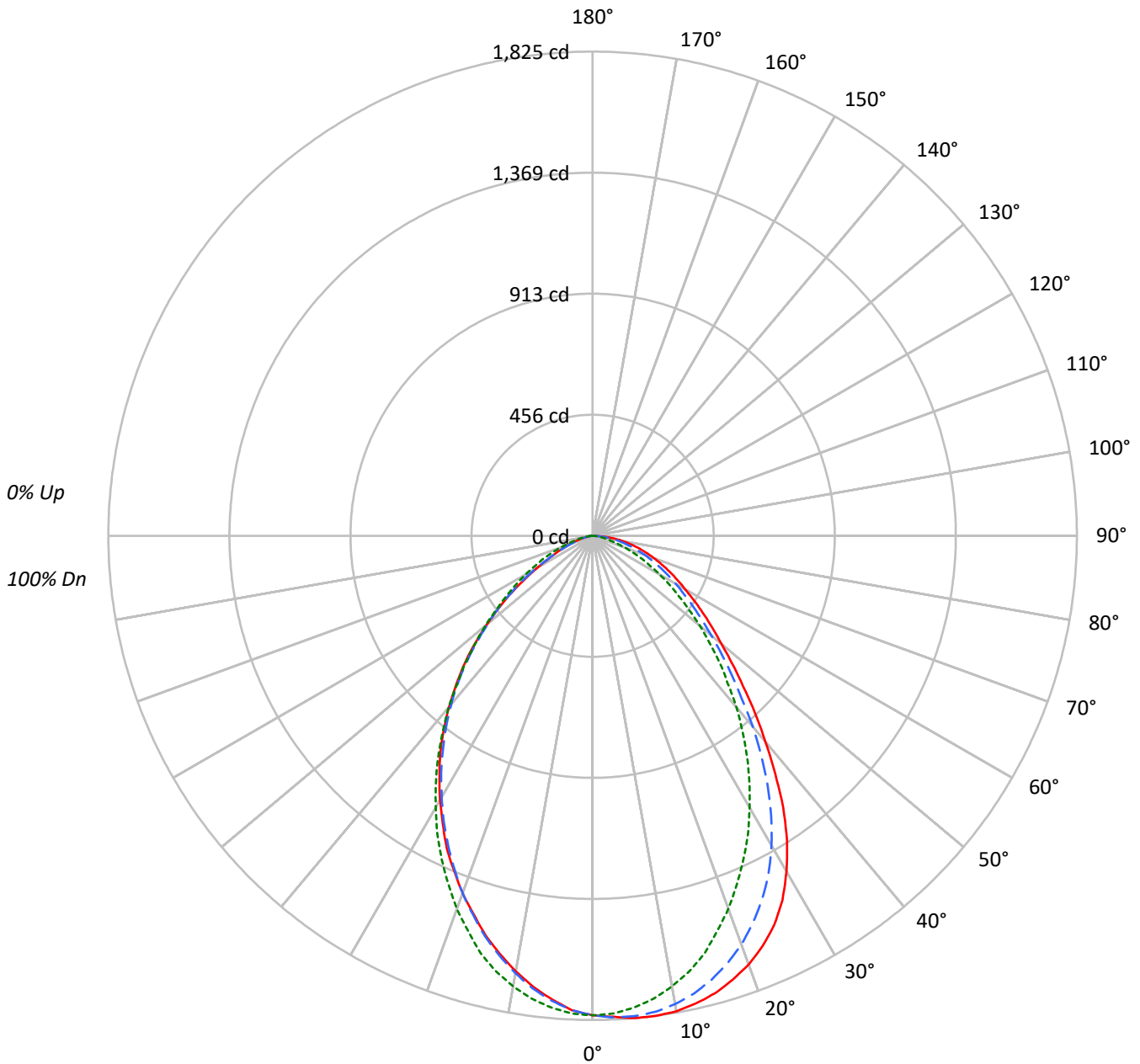
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	117916	117916	117916
5°	119519	116886	114908
10°	120570	114243	110427
15°	120549	110033	105291
20°	119381	103871	99518
25°	116551	96856	93609
30°	110062	89074	86618
35°	99762	80767	79772
40°	86154	71837	71624
45°	73885	62537	62998
50°	64207	53499	52738
55°	57679	45111	42256
60°	52401	37996	31120
65°	49214	31399	22863
70°	46925	24416	16767
75°	44919	17695	11368
80°	42455	12248	7552
85°	37577	7486	3743



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.1	5.3
10°-20°	463.0	14.5
20°-30°	642.8	20.1
30°-40°	665.8	20.8
40°-50°	547.2	17.1
50°-60°	376.1	11.7
60°-70°	216.2	6.7
70°-80°	99.4	3.1
80°-90°	24.2	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°	1274.9	39.8
0°-40°	1940.8	60.6
0°-60°	2864.0	89.4
0°-90°	3203.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3203.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1807	1807	1807	1807	1807	
5°	1825	1817	1785	1760	1755	174
15°	1785	1732	1629	1564	1559	503
25°	1619	1511	1346	1288	1300	741
35°	1253	1150	1014	984	1002	777
45°	801	740	678	670	683	624
55°	507	459	397	374	372	456
65°	319	279	203	143	148	317
75°	178	141	70	45	45	188
85°	50	35	10	5	5	56
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°	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4
2.5°	1814.9	1830.0	1820.0	1817.4	1822.5	1822.5	1822.5	1814.9	1820.0	1812.4	1817.4
5°	1825.0	1837.5	1827.5	1822.5	1827.5	1830.0	1822.5	1817.4	1825.0	1814.9	1817.4
7.5°	1825.0	1837.5	1827.5	1825.0	1827.5	1827.5	1825.0	1814.9	1820.0	1809.9	1809.9
10°	1820.0	1830.0	1820.0	1814.9	1817.4	1814.9	1814.9	1802.4	1804.9	1792.4	1792.4
12.5°	1804.9	1817.4	1804.9	1799.9	1799.9	1799.9	1792.4	1782.2	1784.8	1769.8	1767.2
15°	1784.8	1794.9	1782.2	1777.2	1777.2	1774.8	1769.8	1754.6	1754.6	1739.6	1732.1
17.5°	1754.6	1764.8	1754.6	1747.1	1744.6	1739.6	1734.6	1719.5	1714.5	1697.0	1689.4
20°	1719.5	1727.0	1717.0	1709.5	1704.5	1699.5	1689.4	1674.4	1669.4	1651.8	1639.2
22.5°	1674.4	1684.4	1669.4	1661.8	1656.8	1649.2	1639.2	1624.1	1616.6	1594.0	1579.0
25°	1619.1	1624.1	1611.6	1604.0	1594.0	1589.0	1581.5	1561.4	1553.9	1528.8	1511.1
27.5°	1548.9	1553.9	1538.8	1533.8	1521.2	1516.2	1506.1	1488.6	1478.5	1453.5	1435.9
30°	1461.0	1466.0	1456.0	1448.4	1438.4	1428.4	1420.8	1403.2	1388.1	1363.1	1348.0
32.5°	1363.1	1370.6	1360.6	1350.5	1333.0	1335.5	1322.9	1305.4	1292.8	1270.2	1252.6
35°	1252.6	1257.6	1245.1	1242.6	1232.5	1222.5	1210.0	1197.4	1189.9	1164.8	1149.8
37.5°	1129.6	1142.1	1129.6	1119.6	1114.5	1107.0	1099.5	1081.9	1076.9	1061.9	1041.8
40°	1011.6	1019.1	1011.6	1001.6	994.1	994.1	984.0	974.0	961.4	946.4	938.9
42.5°	906.2	901.1	898.6	893.6	883.6	881.1	878.6	866.0	858.5	843.5	830.9
45°	800.8	803.2	798.2	795.8	788.2	783.2	778.1	768.1	765.6	750.6	740.5
47.5°	712.9	710.4	705.4	705.4	700.4	695.4	690.4	682.8	680.2	667.8	657.8
50°	632.6	635.1	632.6	630.1	622.5	620.0	615.0	610.0	605.0	592.4	582.4
52.5°	567.4	564.8	562.2	562.2	554.8	552.2	547.2	542.2	537.2	524.6	517.1
55°	507.1	507.1	504.6	502.0	494.5	492.0	489.5	484.5	477.0	466.9	459.4
57.5°	451.9	451.9	449.4	446.9	441.8	441.8	436.8	431.8	426.8	416.8	406.6
60°	401.6	404.1	401.6	399.1	394.1	394.1	391.6	384.1	381.5	369.0	361.5
62.5°	359.0	359.0	359.0	356.5	354.0	348.9	348.9	341.4	336.4	328.9	318.8
65°	318.8	318.8	318.8	316.2	311.2	308.8	306.2	301.2	296.2	288.6	278.6
67.5°	281.1	281.1	281.1	278.6	273.6	271.1	268.6	266.1	258.5	251.0	241.0
70°	246.0	246.0	243.5	241.0	238.5	236.0	233.5	228.4	223.4	213.4	205.9
72.5°	210.9	210.9	210.9	205.9	203.4	203.4	198.2	195.8	190.8	180.8	173.2
75°	178.2	175.8	175.8	173.2	170.8	168.2	165.6	163.1	155.6	150.6	140.6
77.5°	145.6	145.6	143.1	140.6	140.6	138.1	135.5	130.5	128.0	120.5	113.0
80°	113.0	113.0	113.0	113.0	110.5	108.0	108.0	102.9	100.4	92.9	87.9
82.5°	85.4	82.9	82.9	82.9	80.4	77.9	77.9	75.2	72.8	67.8	62.8
85°	50.2	47.8	47.8	47.8	45.1	45.1	42.6	42.6	40.1	35.1	35.1
87.5°	15.0	15.0	17.6	17.6	15.0	15.0	15.0	15.0	15.0	12.5	12.5
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4
2.5°	1812.4	1820.0	1809.9	1807.4	1817.4	1812.4	1809.9	1804.9	1807.4	1802.4	1794.9
5°	1809.9	1820.0	1807.4	1799.9	1812.4	1804.9	1799.9	1794.9	1794.9	1784.8	1779.8
7.5°	1802.4	1807.4	1794.9	1787.2	1794.9	1787.2	1782.2	1774.8	1772.2	1759.8	1752.1
10°	1782.2	1787.2	1772.2	1762.2	1769.8	1759.8	1752.1	1744.6	1739.6	1724.5	1714.5
12.5°	1754.6	1757.1	1739.6	1727.0	1732.1	1724.5	1712.0	1702.0	1697.0	1681.9	1669.4
15°	1717.0	1719.5	1699.5	1681.9	1686.9	1676.9	1661.8	1651.8	1644.2	1629.1	1611.6
17.5°	1671.9	1669.4	1646.8	1629.1	1631.6	1619.1	1604.0	1589.0	1579.0	1561.4	1548.9
20°	1621.6	1614.1	1589.0	1568.9	1571.4	1556.4	1538.8	1523.8	1511.1	1496.1	1478.5
22.5°	1558.9	1548.9	1526.2	1501.1	1503.6	1491.1	1466.0	1453.5	1440.9	1420.8	1405.8
25°	1491.1	1476.0	1453.5	1428.4	1428.4	1413.2	1393.2	1378.1	1365.6	1345.5	1327.9
27.5°	1410.8	1403.2	1373.1	1353.0	1350.5	1335.5	1317.9	1300.4	1285.2	1267.6	1250.1
30°	1322.9	1310.4	1287.8	1265.1	1260.1	1247.6	1230.0	1210.0	1199.9	1182.4	1167.2
32.5°	1230.0	1217.5	1192.4	1169.8	1167.2	1157.2	1142.1	1122.1	1112.0	1099.5	1089.5
35°	1124.6	1119.6	1094.5	1076.9	1076.9	1066.9	1051.8	1034.2	1026.8	1014.1	1001.6
37.5°	1024.1	1016.6	994.1	979.0	979.0	966.5	951.4	943.9	936.4	926.2	918.8
40°	918.8	913.8	896.1	881.1	883.6	873.6	863.5	853.5	848.5	843.5	835.9
42.5°	820.9	815.9	803.2	790.8	790.8	783.2	773.1	765.6	760.6	753.1	750.6
45°	733.0	725.5	715.4	702.9	702.9	695.4	690.4	685.2	682.8	677.8	670.2
47.5°	647.6	642.6	632.6	620.0	620.0	620.0	610.0	602.5	602.5	597.5	594.9
50°	574.9	567.4	559.8	549.8	549.8	544.8	537.2	529.6	529.6	527.1	522.1
52.5°	507.1	502.0	492.0	482.0	482.0	477.0	469.4	466.9	464.4	456.9	454.4
55°	449.4	444.4	436.8	424.2	421.8	419.2	411.6	406.6	404.1	396.6	396.6
57.5°	396.6	391.6	379.0	371.5	369.0	364.0	356.5	351.4	348.9	343.9	338.9
60°	351.4	343.9	333.9	323.9	321.4	316.2	308.8	303.8	301.2	291.2	286.1
62.5°	308.8	301.2	291.2	281.1	278.6	273.6	263.6	258.5	253.5	243.5	238.5
65°	268.6	261.1	251.0	241.0	236.0	233.5	223.4	215.9	210.9	203.4	193.2
67.5°	231.0	223.4	213.4	200.9	200.9	193.2	185.8	178.2	170.8	163.1	155.6
70°	195.8	188.2	178.2	168.2	165.6	160.6	153.1	143.1	138.1	128.0	120.5
72.5°	163.1	155.6	145.6	135.5	133.0	128.0	120.5	110.5	102.9	95.4	87.9
75°	133.0	125.5	115.5	108.0	105.4	100.4	92.9	82.9	75.2	70.2	62.8
77.5°	105.4	97.9	90.4	82.9	80.4	75.2	67.8	62.8	55.2	50.2	42.6
80°	80.4	75.2	67.8	62.8	60.2	55.2	50.2	42.6	37.6	32.6	30.1
82.5°	57.8	52.8	47.8	40.1	40.1	35.1	32.6	27.6	22.6	20.1	17.6
85°	32.6	27.6	25.1	22.6	20.1	20.1	17.6	15.0	12.5	10.0	10.0
87.5°	10.0	10.0	7.5	7.5	7.5	7.5	5.0	5.0	5.0	5.0	5.0
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°	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4
2.5°	1794.9	1797.4	1792.4	1797.4	1792.4	1794.9	1789.9	1794.9	1789.9	1794.9	1784.8
5°	1777.2	1777.2	1769.8	1774.8	1769.8	1772.2	1762.2	1764.8	1759.8	1764.8	1754.6
7.5°	1747.1	1749.6	1737.1	1742.1	1734.6	1734.6	1727.0	1729.6	1722.0	1724.5	1717.0
10°	1712.0	1709.5	1697.0	1702.0	1691.9	1691.9	1684.4	1684.4	1674.4	1676.9	1666.9
12.5°	1661.8	1659.2	1644.2	1649.2	1639.2	1639.2	1631.6	1631.6	1621.6	1626.6	1616.6
15°	1604.0	1601.5	1586.5	1589.0	1579.0	1579.0	1568.9	1571.4	1563.9	1568.9	1558.9
17.5°	1538.8	1536.2	1521.2	1523.8	1511.1	1513.8	1506.1	1503.6	1498.6	1501.1	1493.6
20°	1471.0	1466.0	1450.9	1453.5	1448.4	1440.9	1435.9	1438.4	1433.4	1438.4	1430.9
22.5°	1400.8	1390.6	1378.1	1378.1	1373.1	1373.1	1365.6	1370.6	1360.6	1368.1	1363.1
25°	1320.4	1312.9	1302.9	1307.9	1297.8	1297.8	1290.2	1292.8	1287.8	1292.8	1287.8
27.5°	1242.6	1237.5	1222.5	1227.5	1220.0	1222.5	1215.0	1217.5	1215.0	1220.0	1215.0
30°	1159.8	1157.2	1147.2	1147.2	1144.6	1142.1	1139.6	1139.6	1137.1	1144.6	1139.6
32.5°	1081.9	1074.4	1064.4	1071.9	1059.4	1066.9	1061.9	1066.9	1061.9	1066.9	1064.4
35°	1001.6	999.1	986.5	989.0	986.5	986.5	984.0	984.0	984.0	991.5	991.5
37.5°	916.2	913.8	906.2	908.8	903.8	901.1	901.1	906.2	906.2	911.2	911.2
40°	833.4	835.9	828.4	828.4	825.9	825.9	825.9	830.9	828.4	833.4	830.9
42.5°	750.6	750.6	743.0	745.5	743.0	745.5	745.5	750.6	750.6	753.1	750.6
45°	672.8	672.8	670.2	672.8	667.8	670.2	667.8	672.8	670.2	672.8	672.8
47.5°	594.9	594.9	594.9	592.4	592.4	592.4	592.4	592.4	589.9	594.9	592.4
50°	522.1	524.6	522.1	522.1	519.6	522.1	519.6	519.6	514.6	517.1	517.1
52.5°	456.9	456.9	451.9	451.9	451.9	449.4	449.4	449.4	446.9	446.9	441.8
55°	394.1	394.1	389.1	389.1	386.6	384.1	381.5	381.5	374.0	374.0	366.5
57.5°	336.4	333.9	326.4	326.4	321.4	318.8	316.2	313.8	308.8	303.8	301.2
60°	283.6	278.6	273.6	271.1	266.1	261.1	256.0	251.0	246.0	243.5	241.0
62.5°	233.5	225.9	220.9	218.4	213.4	205.9	200.9	195.8	190.8	188.2	183.2
65°	188.2	180.8	173.2	170.8	165.6	160.6	153.1	148.1	143.1	140.6	140.6
67.5°	148.1	140.6	130.5	130.5	125.5	120.5	115.5	110.5	108.0	110.5	110.5
70°	110.5	105.4	97.9	95.4	90.4	85.4	82.9	82.9	82.9	85.4	82.9
72.5°	82.9	75.2	70.2	67.8	65.2	62.8	62.8	62.8	60.2	62.8	62.8
75°	57.8	52.8	47.8	47.8	45.1	45.1	45.1	45.1	45.1	45.1	45.1
77.5°	40.1	35.1	32.6	32.6	32.6	30.1	30.1	30.1	30.1	30.1	30.1
80°	25.1	25.1	22.6	22.6	20.1	20.1	20.1	20.1	20.1	20.1	20.1
82.5°	15.0	15.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
85°	7.5	7.5	7.5	7.5	7.5	5.0	5.0	5.0	5.0	5.0	5.0
87.5°	2.5	2.5	2.5	2.5	2.5	5.0	5.0	5.0	5.0	5.0	5.0
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: P252497

CATALOG NUMBER: LE_6B40D010 EC6B30509024 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4	1807.4
2.5°	1784.8	1792.4	1782.2	1789.9	1787.2	1784.8	1779.8	1789.9
5°	1754.6	1757.1	1747.1	1757.1	1754.6	1749.6	1744.6	1754.6
7.5°	1712.0	1719.5	1707.0	1717.0	1714.5	1709.5	1704.5	1714.5
10°	1664.2	1671.9	1661.8	1669.4	1669.4	1664.2	1656.8	1666.9
12.5°	1611.6	1616.6	1606.6	1616.6	1614.1	1609.1	1606.6	1614.1
15°	1553.9	1561.4	1551.4	1558.9	1556.4	1553.9	1551.4	1558.9
17.5°	1491.1	1498.6	1491.1	1498.6	1498.6	1491.1	1488.6	1493.6
20°	1428.4	1433.4	1425.9	1433.4	1430.9	1430.9	1425.9	1433.4
22.5°	1358.0	1365.6	1360.6	1365.6	1363.1	1363.1	1360.6	1365.6
25°	1287.8	1295.2	1287.8	1295.2	1292.8	1292.8	1287.8	1300.4
27.5°	1217.5	1222.5	1215.0	1225.0	1222.5	1217.5	1220.0	1222.5
30°	1142.1	1147.2	1142.1	1149.8	1149.8	1149.8	1144.6	1149.8
32.5°	1066.9	1074.4	1066.9	1074.4	1071.9	1071.9	1069.4	1074.4
35°	991.5	994.1	989.0	996.6	996.6	999.1	994.1	1001.6
37.5°	913.8	916.2	913.8	916.2	921.2	913.8	918.8	921.2
40°	833.4	838.4	835.9	838.4	838.4	841.0	838.4	841.0
42.5°	753.1	758.1	753.1	760.6	758.1	758.1	760.6	760.6
45°	670.2	677.8	672.8	677.8	680.2	677.8	677.8	682.8
47.5°	592.4	597.5	594.9	597.5	597.5	597.5	597.5	602.5
50°	514.6	517.1	517.1	519.6	519.6	522.1	517.1	519.6
52.5°	436.8	441.8	441.8	441.8	439.2	441.8	441.8	441.8
55°	366.5	369.0	364.0	369.0	369.0	366.5	366.5	371.5
57.5°	298.8	298.8	298.8	298.8	298.8	296.2	298.8	298.8
60°	236.0	238.5	236.0	236.0	236.0	236.0	233.5	238.5
62.5°	183.2	183.2	180.8	183.2	183.2	183.2	185.8	185.8
65°	143.1	145.6	143.1	145.6	145.6	145.6	145.6	148.1
67.5°	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0
70°	85.4	85.4	85.4	87.9	85.4	85.4	85.4	87.9
72.5°	62.8	62.8	62.8	62.8	62.8	62.8	65.2	65.2
75°	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
77.5°	30.1	30.1	30.1	32.6	30.1	32.6	30.1	30.1
80°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
82.5°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
85°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
87.5°	5.0	5.0	5.0	5.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)