

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P244228

Luminaire Tested: **LD8B40D010 ER8B409730 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B40D010 ER8B409730 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3406.0 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

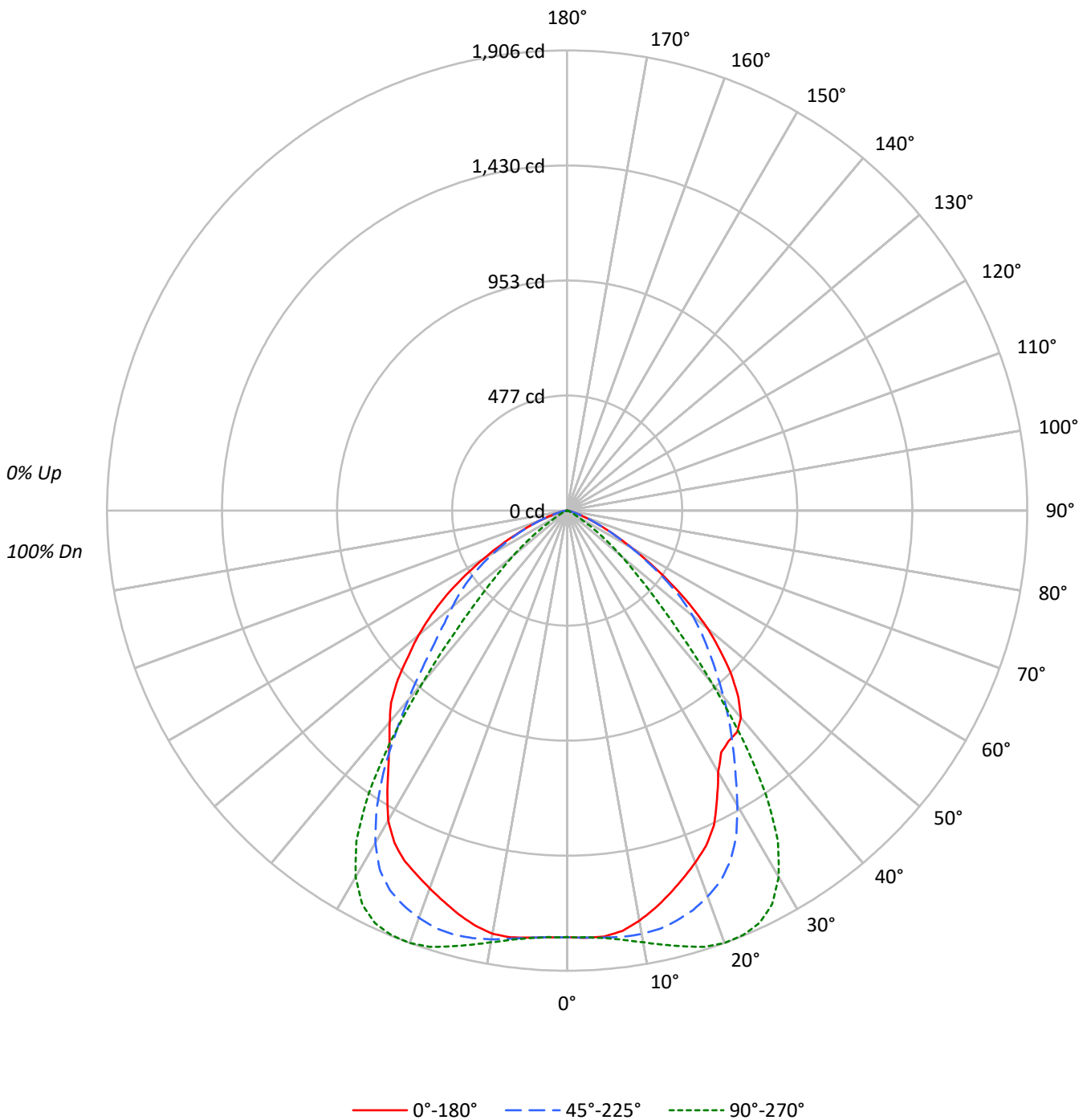
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	5.0
10°-20°	503.4	14.8
20°-30°	767.9	22.5
30°-40°	801.4	23.5
40°-50°	601.9	17.7
50°-60°	370.3	10.9
60°-70°	150.7	4.4
70°-80°	35.5	1.0
80°-90°	4.9	0.1
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°	1441.2	42.3
0°-40°	2242.6	65.8
0°-60°	3214.9	94.4
0°-90°	3406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3406.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1767	1767	1767	1767	1767	
5°	1771	1775	1777	1775	1775	168
15°	1642	1758	1869	1818	1732	463
25°	1439	1600	1885	1736	1598	654
35°	1166	1199	1436	1327	1290	736
45°	962	833	520	776	992	734
55°	520	493	136	493	609	467
65°	162	164	21	220	234	169
75°	28	28	4	50	52	34
85°	3	3	1	7	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9
2.5°	1771.6	1768.8	1771.6	1771.6	1772.6	1770.7	1771.6	1772.6	1770.7	1770.7	1770.7
5°	1770.7	1768.8	1770.7	1769.7	1771.6	1771.6	1773.5	1773.5	1775.4	1775.4	1778.2
7.5°	1755.7	1751.9	1755.7	1758.5	1760.3	1764.1	1768.8	1772.6	1776.3	1780.1	1784.7
10°	1724.7	1724.7	1727.5	1733.2	1738.8	1745.3	1753.8	1763.2	1772.6	1781.0	1789.4
12.5°	1686.3	1683.5	1689.1	1696.6	1705.0	1715.3	1728.5	1742.5	1757.5	1774.4	1787.6
15°	1642.2	1639.4	1645.9	1653.4	1663.8	1678.8	1694.7	1713.5	1735.0	1757.5	1779.1
17.5°	1597.2	1596.2	1602.8	1613.1	1621.6	1637.5	1658.1	1680.6	1705.0	1735.0	1763.2
20°	1551.2	1550.3	1556.8	1565.3	1576.5	1591.5	1612.2	1638.4	1667.5	1701.3	1734.1
22.5°	1503.4	1504.3	1509.9	1519.3	1528.7	1544.6	1566.2	1592.5	1624.4	1660.9	1697.5
25°	1438.7	1434.0	1441.5	1450.9	1466.8	1479.9	1500.6	1528.7	1561.5	1600.0	1643.1
27.5°	1344.9	1343.9	1350.5	1358.9	1373.0	1389.0	1411.5	1440.5	1475.2	1517.4	1559.6
30°	1251.1	1253.0	1255.8	1264.2	1273.6	1289.6	1312.1	1336.5	1369.3	1409.6	1454.6
32.5°	1187.3	1187.3	1191.1	1196.7	1203.3	1211.7	1227.7	1245.5	1270.8	1298.9	1331.8
35°	1165.7	1162.0	1165.7	1166.7	1167.6	1169.5	1172.3	1178.0	1186.4	1198.6	1210.8
37.5°	1156.4	1153.6	1153.6	1149.8	1145.1	1139.5	1132.0	1123.5	1114.2	1102.0	1092.6
40°	1119.8	1117.9	1116.0	1112.3	1102.0	1090.7	1078.5	1058.8	1037.3	1007.2	977.3
42.5°	1049.5	1047.6	1046.6	1039.1	1029.8	1016.6	1002.6	981.9	954.7	916.3	873.1
45°	962.2	958.5	955.7	949.1	942.5	931.3	918.2	899.4	872.2	832.8	781.2
47.5°	861.0	859.1	858.1	855.3	848.8	842.2	833.8	818.8	794.4	756.8	703.4
50°	758.7	755.0	756.8	755.9	753.1	748.4	742.8	732.5	713.7	679.9	631.2
52.5°	641.5	641.5	640.6	643.4	644.3	643.4	644.3	633.1	617.1	591.8	550.5
55°	519.6	519.6	522.4	526.1	529.9	530.8	529.9	525.2	513.9	493.3	456.7
57.5°	405.1	403.3	408.9	414.5	418.3	422.0	419.2	415.5	408.9	392.0	363.9
60°	308.6	308.6	312.3	316.1	319.8	323.6	322.6	321.7	316.1	304.8	282.3
62.5°	227.0	227.9	227.9	230.7	234.5	238.2	241.0	238.2	235.4	227.9	212.9
65°	162.2	161.3	162.2	165.1	167.9	171.6	173.5	172.6	169.7	164.1	152.9
67.5°	108.8	107.9	111.6	112.5	114.4	118.2	117.2	118.2	117.2	112.5	103.2
70°	71.3	69.4	71.3	70.3	73.2	74.1	76.0	76.9	76.0	73.2	70.3
72.5°	44.1	43.1	44.1	45.0	46.0	46.9	48.8	48.8	47.8	46.0	42.2
75°	28.1	25.3	26.3	24.4	26.3	26.3	28.1	29.1	28.1	28.1	26.3
77.5°	16.9	16.9	16.9	16.9	16.9	16.9	16.9	17.8	18.7	16.9	15.9
80°	8.4	8.4	9.4	9.4	9.4	10.3	9.4	9.4	9.4	10.3	7.5
82.5°	6.6	5.6	5.6	5.6	6.6	5.6	5.6	5.6	5.6	5.6	5.6
85°	2.8	3.7	2.8	1.9	2.8	2.8	3.7	2.8	2.8	2.8	3.7
87.5°	0.9	0.9	0.0	0.0	0.0	0.9	0.0	0.9	0.9	1.9	0.0
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9
2.5°	1771.6	1769.7	1769.7	1768.8	1770.7	1768.8	1769.7	1768.8	1768.8	1770.7	1768.8
5°	1778.2	1779.1	1777.2	1776.3	1779.1	1779.1	1779.1	1777.2	1777.2	1778.2	1777.2
7.5°	1787.6	1789.4	1790.4	1791.3	1793.2	1794.1	1794.1	1793.2	1792.2	1795.1	1791.3
10°	1797.9	1800.7	1806.3	1809.1	1813.8	1813.8	1815.7	1815.7	1813.8	1815.7	1814.8
12.5°	1794.1	1811.0	1820.4	1826.9	1833.5	1839.1	1841.0	1842.0	1841.0	1844.8	1841.0
15°	1800.7	1814.8	1829.8	1841.0	1853.2	1859.8	1861.6	1869.1	1871.0	1872.0	1866.3
17.5°	1790.4	1815.7	1831.6	1848.5	1866.3	1878.5	1889.8	1894.5	1895.4	1897.3	1889.8
20°	1766.9	1795.1	1819.4	1843.8	1864.5	1883.2	1892.6	1905.7	1902.0	1909.5	1899.2
22.5°	1735.0	1766.9	1797.9	1829.8	1851.3	1873.8	1893.5	1902.9	1907.6	1907.6	1896.3
25°	1684.4	1721.9	1755.7	1788.5	1821.3	1848.5	1871.0	1885.1	1887.9	1887.0	1873.8
27.5°	1605.6	1645.9	1685.3	1722.9	1763.2	1795.1	1821.3	1838.2	1842.9	1842.9	1828.8
30°	1496.8	1540.0	1578.4	1623.4	1664.7	1700.3	1736.9	1751.9	1760.3	1760.3	1744.4
32.5°	1367.4	1404.0	1439.6	1483.7	1528.7	1569.0	1603.7	1624.4	1634.7	1633.7	1619.7
35°	1226.7	1244.5	1271.7	1304.6	1344.9	1382.4	1416.2	1435.9	1453.7	1452.7	1439.6
37.5°	1086.0	1081.3	1084.2	1096.4	1121.7	1147.9	1174.2	1193.0	1208.0	1214.5	1211.7
40°	948.2	923.8	900.3	891.9	893.8	903.2	917.2	931.3	948.2	956.6	960.4
42.5°	824.4	783.1	741.8	710.9	693.1	687.4	694.0	698.7	709.0	721.2	733.4
45°	725.0	669.6	615.2	567.4	537.4	519.6	515.8	519.6	525.2	537.4	553.3
47.5°	643.4	578.7	517.7	464.2	420.2	396.7	390.2	388.3	393.9	405.1	426.7
50°	571.1	506.4	438.9	377.0	331.1	304.8	295.4	291.7	298.2	306.7	326.4
52.5°	492.4	428.6	359.2	299.2	251.3	224.2	213.8	208.2	211.9	223.2	242.9
55°	407.0	347.9	285.1	223.2	177.2	151.9	139.7	136.0	139.7	151.9	171.6
57.5°	321.7	272.0	219.5	161.3	120.0	94.7	82.5	78.8	89.1	93.8	114.4
60°	251.3	211.0	166.0	118.2	82.5	62.8	50.6	47.8	52.5	60.9	77.8
62.5°	188.5	163.2	127.5	84.4	60.9	40.3	33.8	31.0	33.8	40.3	53.5
65°	136.9	117.2	89.1	61.9	41.3	30.0	22.5	20.6	23.5	28.1	39.4
67.5°	93.8	78.8	61.9	43.1	28.1	18.7	15.9	15.9	16.9	20.6	29.1
70°	60.9	51.6	39.4	28.1	18.7	14.1	12.2	10.3	12.2	15.0	19.7
72.5°	38.5	32.8	25.3	19.7	14.1	10.3	8.4	7.5	9.4	11.2	15.0
75°	23.5	17.8	13.1	10.3	7.5	7.5	7.5	3.7	4.7	7.5	9.4
77.5°	14.1	12.2	10.3	8.4	6.6	3.7	3.7	3.7	4.7	5.6	8.4
80°	7.5	6.6	4.7	4.7	3.7	2.8	3.7	2.8	1.9	4.7	5.6
82.5°	4.7	3.7	3.7	3.7	4.7	1.9	2.8	1.9	2.8	3.7	2.8
85°	2.8	2.8	2.8	1.9	4.7	1.9	1.9	0.9	0.9	1.9	1.9
87.5°	0.0	0.9	0.9	0.0	0.9	0.0	0.9	0.9	0.9	0.9	0.9
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9	1766.9
2.5°	1769.7	1768.8	1769.7	1768.8	1768.8	1768.8	1769.7	1769.7	1768.8	1768.8	1770.7
5°	1777.2	1777.2	1777.2	1776.3	1775.4	1775.4	1777.2	1777.2	1774.4	1777.2	1777.2
7.5°	1793.2	1790.4	1793.2	1789.4	1787.6	1788.5	1789.4	1787.6	1785.7	1786.6	1786.6
10°	1813.8	1811.0	1811.0	1808.2	1805.4	1803.5	1801.6	1796.9	1792.2	1791.3	1787.6
12.5°	1838.2	1833.5	1830.7	1825.1	1820.4	1813.8	1808.2	1800.7	1791.3	1784.7	1778.2
15°	1862.6	1855.1	1848.5	1839.1	1828.8	1817.6	1805.4	1793.2	1778.2	1765.1	1753.8
17.5°	1882.3	1872.0	1859.8	1844.8	1829.8	1812.9	1795.1	1777.2	1755.7	1738.8	1725.7
20°	1888.8	1873.8	1857.9	1838.2	1818.5	1795.1	1772.6	1749.1	1724.7	1706.9	1691.9
22.5°	1880.4	1862.6	1842.9	1822.3	1796.0	1770.7	1744.4	1717.2	1695.6	1671.3	1657.2
25°	1857.0	1835.4	1813.8	1789.4	1764.1	1736.0	1707.8	1679.7	1653.4	1640.3	1622.5
27.5°	1809.1	1785.7	1762.2	1736.9	1707.8	1679.7	1650.6	1623.4	1600.9	1583.1	1572.8
30°	1724.7	1697.5	1670.3	1643.1	1617.8	1588.7	1561.5	1539.0	1516.5	1502.4	1492.1
32.5°	1595.3	1570.9	1543.7	1517.4	1494.0	1469.6	1447.1	1427.4	1411.5	1402.1	1394.6
35°	1420.9	1396.5	1375.8	1357.1	1337.4	1327.1	1313.0	1301.7	1295.2	1291.4	1290.5
37.5°	1201.4	1187.3	1180.8	1177.0	1173.3	1170.5	1172.3	1177.0	1180.8	1187.3	1194.8
40°	966.9	979.1	982.9	996.0	1008.2	1024.1	1042.0	1062.6	1079.5	1101.0	1116.0
42.5°	753.1	775.6	801.9	830.0	860.0	889.1	924.7	957.5	987.6	1014.8	1038.2
45°	578.7	613.3	652.8	693.1	733.4	775.6	818.8	859.1	894.7	923.8	948.2
47.5°	451.1	489.6	540.2	589.9	638.7	688.4	736.2	778.4	808.4	836.6	858.1
50°	357.3	401.4	456.7	513.9	567.4	619.9	670.6	710.0	740.0	762.5	778.4
52.5°	276.7	329.2	385.5	445.5	502.7	559.9	606.8	643.4	667.8	687.4	699.6
55°	206.3	257.9	317.9	379.8	438.0	493.3	537.4	569.3	590.9	602.1	608.7
57.5°	149.1	196.0	256.0	317.9	370.4	423.0	458.6	487.7	499.9	506.4	509.3
60°	108.8	151.9	205.4	258.9	308.6	350.8	381.7	401.4	410.8	414.5	413.6
62.5°	79.7	117.2	163.2	208.2	248.5	283.2	307.6	320.7	325.4	327.3	324.5
65°	60.9	90.0	129.4	164.1	195.1	220.4	238.2	246.7	249.5	248.5	246.7
67.5°	45.0	67.5	96.6	122.9	145.4	165.1	174.4	182.0	183.8	181.0	178.2
70°	31.9	49.7	70.3	88.2	105.0	116.3	126.6	127.5	127.5	126.6	124.7
72.5°	22.5	34.7	47.8	60.0	70.3	78.8	82.5	85.3	84.4	83.5	81.6
75°	15.0	21.6	34.7	37.5	46.9	49.7	53.5	53.5	54.4	51.6	51.6
77.5°	9.4	15.0	20.6	24.4	28.1	31.9	33.8	33.8	34.7	33.8	33.8
80°	5.6	9.4	11.2	16.9	16.9	19.7	20.6	21.6	19.7	22.5	19.7
82.5°	3.7	5.6	8.4	8.4	10.3	12.2	12.2	13.1	13.1	12.2	12.2
85°	2.8	3.7	4.7	5.6	5.6	6.6	5.6	5.6	6.6	7.5	6.6
87.5°	0.9	1.9	0.9	1.9	1.9	3.7	2.8	2.8	2.8	3.7	3.7
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: P244228

CATALOG NUMBER: LD8B40D010 ER8B409730 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1766.9	1766.9	1766.9	1766.9
2.5°	1768.8	1769.7	1768.8	1768.8
5°	1777.2	1776.3	1777.2	1775.4
7.5°	1783.8	1783.8	1782.9	1782.9
10°	1783.8	1780.1	1780.1	1780.1
12.5°	1769.7	1765.1	1762.2	1760.3
15°	1745.3	1736.9	1733.2	1732.2
17.5°	1713.5	1706.0	1701.3	1698.5
20°	1676.9	1669.4	1663.8	1664.7
22.5°	1645.0	1636.6	1632.8	1630.9
25°	1613.1	1602.8	1600.0	1598.1
27.5°	1561.5	1555.9	1553.1	1550.3
30°	1482.7	1479.9	1475.2	1481.8
32.5°	1391.8	1387.1	1383.3	1386.2
35°	1291.4	1288.6	1291.4	1289.6
37.5°	1199.5	1202.3	1206.1	1208.0
40°	1127.3	1137.6	1141.4	1143.2
42.5°	1055.1	1067.3	1074.8	1079.5
45°	966.0	978.2	986.6	992.3
47.5°	874.1	884.4	892.8	891.9
50°	790.6	796.2	800.0	803.7
52.5°	706.2	706.2	707.1	707.1
55°	610.5	608.7	607.7	608.7
57.5°	505.5	503.6	502.7	499.9
60°	409.8	404.2	400.5	400.5
62.5°	320.7	314.2	311.4	310.4
65°	241.0	240.1	234.5	233.5
67.5°	174.4	170.7	166.9	167.9
70°	122.9	117.2	117.2	115.4
72.5°	79.7	76.9	76.0	76.0
75°	49.7	49.7	47.8	51.6
77.5°	32.8	32.8	31.9	32.8
80°	19.7	19.7	19.7	18.7
82.5°	12.2	13.1	12.2	12.2
85°	6.6	7.5	5.6	8.4
87.5°	3.7	4.7	3.7	4.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)