

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: P246160

Luminaire Tested: **LD8B40D010 ER8B40950 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246160
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B40D010 ER8B40950 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

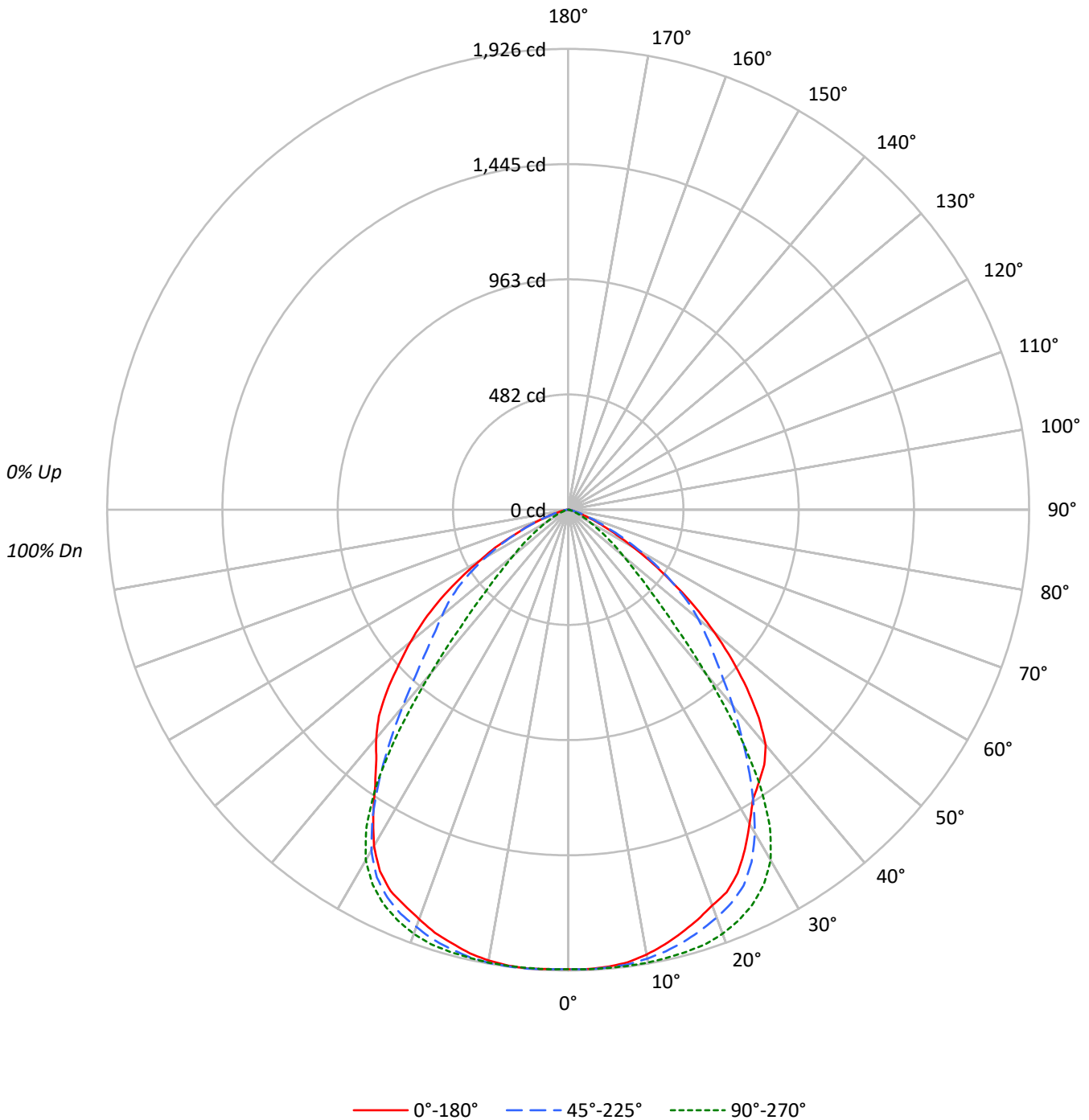
Lumens per Lamp: N/A
Luminaire Lumens: 3640.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

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	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	59221	59221	59221
5°	59351	59512	59577
10°	59101	60169	59909
15°	58447	61048	59896
20°	57745	61906	59740
25°	56997	61978	59804
30°	53923	60236	57775
35°	52310	52352	52894
40°	51666	36019	50213
45°	46034	21626	46666
50°	38277	14392	41247
55°	28709	9919	34972
60°	19458	6611	26384
65°	11733	4290	18124
70°	6510	2326	11153
75°	2943	977	5778
80°	2557	1101	4031
85°	2901	1451	4033



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.3	5.0
10°-20°	532.3	14.6
20°-30°	807.9	22.2
30°-40°	848.6	23.3
40°-50°	636.2	17.5
50°-60°	408.2	11.2
60°-70°	174.6	4.8
70°-80°	41.3	1.1
80°-90°	7.7	0.2
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°	1523.5	41.9
0°-40°	2372.1	65.2
0°-60°	3416.5	93.9
0°-90°	3640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3640.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1920	1920	1920	1920	1920	
5°	1917	1920	1923	1926	1925	182
15°	1831	1869	1912	1900	1876	516
25°	1675	1734	1822	1789	1758	765
35°	1390	1312	1391	1374	1405	872
45°	1056	863	496	838	1070	808
55°	534	534	184	557	650	484
65°	161	190	59	244	248	172
75°	25	29	8	50	48	36
85°	8	5	4	8	11	9
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°	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5
2.5°	1921.6	1923.6	1922.6	1922.6	1921.6	1922.6	1922.6	1924.7	1924.7	1922.6	1921.6
5°	1917.4	1919.5	1919.5	1917.4	1917.4	1922.6	1919.5	1921.6	1921.6	1920.5	1920.5
7.5°	1908.2	1908.2	1912.3	1909.2	1909.2	1912.3	1911.3	1913.3	1915.4	1916.4	1916.4
10°	1887.5	1889.6	1890.6	1890.6	1891.7	1894.8	1896.8	1901.0	1903.0	1905.1	1906.1
12.5°	1861.8	1864.9	1865.9	1864.9	1868.0	1872.1	1877.3	1882.4	1885.5	1889.6	1892.7
15°	1830.8	1830.8	1832.9	1836.0	1838.1	1844.3	1849.4	1855.6	1863.8	1869.0	1874.1
17.5°	1796.8	1798.9	1802.0	1802.0	1806.1	1816.4	1819.5	1828.8	1838.1	1843.2	1853.5
20°	1759.7	1761.8	1764.9	1766.9	1772.1	1780.3	1786.5	1794.8	1805.1	1814.4	1824.7
22.5°	1730.9	1726.7	1728.8	1730.9	1736.0	1743.2	1750.4	1760.7	1771.1	1780.3	1790.7
25°	1675.2	1676.2	1679.3	1681.4	1687.6	1693.7	1702.0	1714.4	1723.6	1734.0	1745.3
27.5°	1599.9	1601.0	1606.1	1606.1	1611.3	1621.6	1626.7	1637.0	1649.4	1659.7	1673.1
30°	1514.4	1516.4	1516.4	1520.6	1523.6	1528.8	1534.0	1544.3	1550.4	1559.7	1578.3
32.5°	1436.0	1438.1	1437.0	1436.0	1432.9	1431.9	1430.9	1432.9	1435.0	1438.1	1445.3
35°	1389.6	1384.5	1380.4	1373.1	1364.9	1354.6	1345.3	1332.9	1321.6	1312.3	1302.0
37.5°	1345.3	1344.3	1338.1	1327.8	1311.3	1292.7	1271.1	1244.3	1217.5	1188.6	1160.8
40°	1283.5	1280.3	1275.2	1260.8	1242.2	1219.5	1190.7	1157.7	1114.4	1070.1	1024.7
42.5°	1178.3	1179.3	1173.1	1161.8	1144.3	1122.6	1092.7	1056.7	1010.3	957.7	898.9
45°	1055.6	1055.6	1053.6	1044.3	1031.9	1014.4	991.7	961.8	916.5	862.8	800.0
47.5°	927.8	928.8	925.7	923.7	918.5	907.2	890.7	868.0	836.1	784.5	721.6
50°	797.9	797.9	803.1	802.0	802.0	797.9	790.7	777.3	749.5	708.2	649.5
52.5°	668.0	670.1	673.2	677.3	682.4	690.7	682.4	676.3	658.7	626.8	576.3
55°	534.0	536.1	541.2	548.4	554.6	562.9	564.9	564.9	555.6	534.0	495.9
57.5°	419.6	416.5	420.6	426.8	435.0	443.3	449.5	456.7	455.6	441.2	410.3
60°	315.5	316.5	319.6	325.8	331.9	339.2	347.4	353.6	356.7	349.5	329.9
62.5°	229.9	229.9	234.0	240.2	243.3	253.6	258.7	261.9	264.9	263.9	251.5
65°	160.8	162.9	164.9	168.0	171.1	177.3	180.4	186.6	188.7	189.7	180.4
67.5°	113.4	110.3	112.4	114.4	117.5	121.7	127.8	127.8	130.9	130.9	124.7
70°	72.2	72.2	73.2	76.3	78.3	79.4	81.4	83.5	86.6	85.6	85.6
72.5°	48.5	47.4	48.5	49.5	50.5	53.6	53.6	54.6	56.7	57.7	53.6
75°	24.7	25.8	27.8	26.8	29.9	27.8	28.9	32.0	30.9	28.9	28.9
77.5°	20.6	20.6	20.6	19.6	21.6	21.6	20.6	22.7	21.6	21.6	20.6
80°	14.4	15.5	14.4	13.4	14.4	13.4	13.4	13.4	13.4	13.4	12.4
82.5°	11.4	9.3	10.3	9.3	10.3	10.3	9.3	8.2	8.2	9.3	8.2
85°	8.2	6.2	7.2	7.2	6.2	6.2	6.2	6.2	6.2	5.1	5.1
87.5°	5.1	3.1	3.1	3.1	4.1	4.1	4.1	3.1	4.1	4.1	2.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5
2.5°	1923.6	1922.6	1924.7	1923.6	1923.6	1922.6	1923.6	1922.6	1924.7	1920.5	1921.6
5°	1923.6	1921.6	1922.6	1923.6	1924.7	1922.6	1922.6	1922.6	1924.7	1922.6	1923.6
7.5°	1919.5	1918.5	1921.6	1923.6	1922.6	1921.6	1923.6	1922.6	1924.7	1923.6	1925.7
10°	1911.3	1912.3	1914.4	1917.4	1918.5	1919.5	1921.6	1921.6	1924.7	1920.5	1922.6
12.5°	1898.9	1903.0	1908.2	1910.2	1914.4	1914.4	1916.4	1917.4	1919.5	1918.5	1921.6
15°	1883.4	1888.6	1894.8	1899.9	1905.1	1908.2	1911.3	1912.3	1915.4	1912.3	1913.3
17.5°	1864.9	1871.0	1880.3	1886.5	1894.8	1897.9	1902.0	1904.0	1907.1	1905.1	1906.1
20°	1839.1	1846.3	1856.6	1865.9	1871.0	1878.3	1883.4	1886.5	1888.6	1886.5	1887.5
22.5°	1803.0	1813.3	1826.7	1833.9	1844.3	1850.4	1851.5	1858.7	1863.8	1858.7	1860.8
25°	1760.7	1771.1	1781.4	1796.8	1806.1	1813.3	1820.5	1821.6	1826.7	1825.7	1824.7
27.5°	1690.6	1704.1	1721.6	1734.0	1746.3	1757.7	1765.9	1768.0	1773.1	1771.1	1772.1
30°	1594.8	1609.2	1625.7	1645.3	1662.8	1674.1	1684.5	1691.7	1696.8	1693.7	1692.7
32.5°	1458.7	1473.1	1490.7	1510.2	1530.9	1547.3	1559.7	1569.0	1575.2	1573.1	1568.0
35°	1303.0	1307.2	1318.5	1334.0	1351.5	1369.0	1380.4	1390.7	1397.9	1399.9	1399.9
37.5°	1143.3	1129.9	1121.6	1121.6	1131.9	1139.1	1149.4	1155.6	1167.0	1171.1	1174.2
40°	988.6	957.7	928.8	907.2	892.8	891.7	891.7	894.8	905.1	918.5	930.9
42.5°	850.5	801.0	756.7	716.5	687.6	671.1	663.9	664.9	673.2	685.5	706.1
45°	740.2	678.3	622.7	574.2	535.0	509.2	496.9	495.9	502.0	516.5	539.2
47.5°	654.6	588.6	525.7	470.1	427.8	400.0	385.5	381.4	385.5	398.9	425.8
50°	583.5	515.5	450.5	392.8	347.4	318.6	305.1	300.0	305.1	316.5	343.3
52.5°	517.5	447.4	386.6	330.9	282.5	257.7	243.3	240.2	243.3	256.7	278.3
55°	441.2	381.4	321.6	266.0	223.7	199.0	187.6	184.5	187.6	200.0	222.7
57.5°	366.0	314.4	261.9	211.3	175.3	153.6	143.3	139.2	146.4	154.6	181.4
60°	295.9	254.6	210.3	166.0	136.1	116.5	108.2	107.2	109.3	119.6	138.1
62.5°	232.0	197.9	162.9	126.8	102.1	93.8	83.5	82.5	84.5	90.7	105.2
65°	167.0	145.4	118.6	92.8	73.2	61.8	57.7	58.8	60.8	65.0	78.3
67.5°	116.5	101.0	82.5	65.0	50.5	45.4	41.2	40.2	41.2	48.5	55.7
70°	78.3	69.1	55.7	49.5	35.1	27.8	28.9	25.8	29.9	29.9	36.1
72.5°	51.5	45.4	37.1	28.9	24.7	19.6	19.6	18.6	20.6	21.6	26.8
75°	26.8	20.6	20.6	14.4	10.3	5.1	9.3	8.2	7.2	8.2	10.3
77.5°	18.6	15.5	14.4	11.4	10.3	8.2	8.2	8.2	8.2	9.3	10.3
80°	11.4	11.4	8.2	7.2	6.2	5.1	6.2	6.2	6.2	6.2	7.2
82.5°	7.2	6.2	6.2	5.1	5.1	4.1	4.1	4.1	4.1	4.1	6.2
85°	6.2	4.1	4.1	3.1	4.1	7.2	3.1	4.1	4.1	4.1	3.1
87.5°	2.1	3.1	3.1	3.1	2.1	1.0	2.1	3.1	3.1	5.1	4.1
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5
2.5°	1923.6	1924.7	1924.7	1923.6	1923.6	1921.6	1925.7	1922.6	1923.6	1927.7	1924.7
5°	1925.7	1926.7	1926.7	1925.7	1925.7	1925.7	1926.7	1926.7	1925.7	1924.7	1926.7
7.5°	1929.8	1928.8	1928.8	1926.7	1926.7	1924.7	1926.7	1923.6	1925.7	1923.6	1926.7
10°	1924.7	1925.7	1924.7	1923.6	1923.6	1922.6	1922.6	1919.5	1920.5	1917.4	1919.5
12.5°	1921.6	1920.5	1920.5	1918.5	1916.4	1914.4	1913.3	1910.2	1910.2	1903.0	1906.1
15°	1913.3	1914.4	1911.3	1907.1	1905.1	1899.9	1897.9	1893.7	1889.6	1884.5	1885.5
17.5°	1906.1	1903.0	1898.9	1894.8	1886.5	1882.4	1878.3	1872.1	1870.0	1863.8	1861.8
20°	1884.5	1882.4	1877.3	1870.0	1864.9	1855.6	1851.5	1845.3	1840.1	1833.9	1830.8
22.5°	1856.6	1854.5	1848.4	1841.2	1832.9	1828.8	1824.7	1813.3	1808.2	1802.0	1800.9
25°	1821.6	1818.5	1812.3	1804.1	1799.9	1788.6	1784.5	1776.2	1774.2	1768.0	1766.9
27.5°	1768.0	1763.8	1756.6	1746.3	1739.1	1731.9	1727.8	1721.6	1719.5	1713.3	1712.3
30°	1687.6	1682.4	1668.0	1663.9	1651.5	1644.3	1644.3	1636.0	1637.0	1632.9	1632.9
32.5°	1560.8	1552.5	1541.2	1532.9	1524.7	1520.6	1520.6	1517.5	1519.5	1519.5	1521.6
35°	1392.7	1381.4	1375.2	1370.0	1370.0	1374.2	1386.5	1389.6	1395.8	1401.0	1405.1
37.5°	1177.3	1176.2	1183.5	1189.6	1205.1	1222.6	1244.3	1262.8	1280.3	1292.7	1305.1
40°	944.3	970.1	990.7	1019.6	1043.2	1077.3	1116.4	1148.4	1178.3	1200.0	1222.6
42.5°	737.1	770.1	813.4	855.6	897.9	944.3	995.8	1040.2	1079.3	1109.2	1132.9
45°	574.2	619.6	672.1	725.7	780.4	838.1	891.7	937.1	978.3	1009.2	1033.0
47.5°	462.9	512.4	572.1	630.9	692.8	753.6	813.4	852.5	886.6	911.3	933.0
50°	382.4	435.0	497.9	564.9	626.8	687.6	739.1	777.3	805.1	826.8	840.2
52.5°	319.6	375.2	442.3	509.2	571.1	626.8	673.2	702.0	724.7	740.2	752.5
55°	263.9	317.5	380.4	443.3	504.1	556.7	594.8	616.5	634.0	643.3	650.5
57.5°	215.5	264.9	322.7	380.4	433.0	476.3	506.2	527.8	536.1	543.3	542.2
60°	169.1	215.5	268.0	317.5	362.9	397.9	419.6	431.9	438.1	441.2	439.2
62.5°	133.0	175.3	215.5	258.7	291.7	321.6	342.3	342.3	345.3	346.4	349.5
65°	99.0	130.9	166.0	197.9	224.7	244.3	255.7	258.7	262.9	261.9	259.8
67.5°	73.2	96.9	122.7	146.4	164.9	177.3	185.5	192.8	191.8	189.7	188.7
70°	50.5	66.0	88.7	103.1	116.5	128.9	130.9	131.9	133.0	134.0	131.9
72.5°	35.1	46.4	58.8	71.1	79.4	84.5	89.7	90.7	90.7	90.7	89.7
75°	17.5	23.7	35.1	40.2	47.4	49.5	53.6	53.6	56.7	52.6	51.5
77.5°	15.5	18.6	24.7	28.9	32.0	35.1	36.1	39.2	38.1	36.1	37.1
80°	9.3	11.4	15.5	17.5	21.6	22.7	23.7	24.7	23.7	24.7	24.7
82.5°	7.2	8.2	10.3	10.3	13.4	13.4	14.4	14.4	15.5	15.5	15.5
85°	4.1	7.2	6.2	12.4	8.2	8.2	10.3	12.4	10.3	10.3	12.4
87.5°	4.1	4.1	3.1	4.1	4.1	4.1	5.1	6.2	6.2	7.2	6.2
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: P246160

CATALOG NUMBER: LD8B40D010 ER8B40950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1920.5	1920.5	1920.5	1920.5
2.5°	1923.6	1925.7	1922.6	1921.6
5°	1926.7	1926.7	1924.7	1924.7
7.5°	1926.7	1926.7	1923.6	1921.6
10°	1918.5	1918.5	1915.4	1913.3
12.5°	1903.0	1903.0	1902.0	1898.9
15°	1883.4	1883.4	1879.3	1876.2
17.5°	1856.6	1858.7	1853.5	1853.5
20°	1827.8	1826.7	1822.6	1820.5
22.5°	1797.9	1795.8	1794.8	1788.6
25°	1765.9	1763.8	1760.7	1757.7
27.5°	1711.3	1710.2	1707.1	1703.0
30°	1627.8	1626.7	1622.6	1622.6
32.5°	1519.5	1518.5	1514.4	1515.4
35°	1407.2	1411.3	1409.2	1405.1
37.5°	1313.3	1316.4	1318.5	1316.4
40°	1235.0	1244.3	1245.3	1247.4
42.5°	1151.5	1163.9	1168.0	1170.0
45°	1051.5	1062.8	1072.1	1070.1
47.5°	949.4	957.7	965.9	959.8
50°	851.5	856.7	859.8	859.8
52.5°	758.7	758.7	757.7	758.7
55°	652.5	652.5	648.4	650.5
57.5°	541.2	543.3	540.2	535.0
60°	438.1	433.0	430.9	427.8
62.5°	341.2	341.2	334.0	343.3
65°	255.7	252.6	249.5	248.4
67.5°	185.5	184.5	181.4	180.4
70°	130.9	126.8	125.8	123.7
72.5°	87.6	87.6	85.6	85.6
75°	53.6	48.5	47.4	48.5
77.5°	37.1	36.1	36.1	35.1
80°	24.7	23.7	25.8	22.7
82.5°	15.5	16.5	15.5	16.5
85°	10.3	12.4	11.4	11.4
87.5°	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)