

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: P246173

Luminaire Tested: **LSR8B50D010 EC8B509730 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246173
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: LSR8B50D010 EC8B509730 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3638.0 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

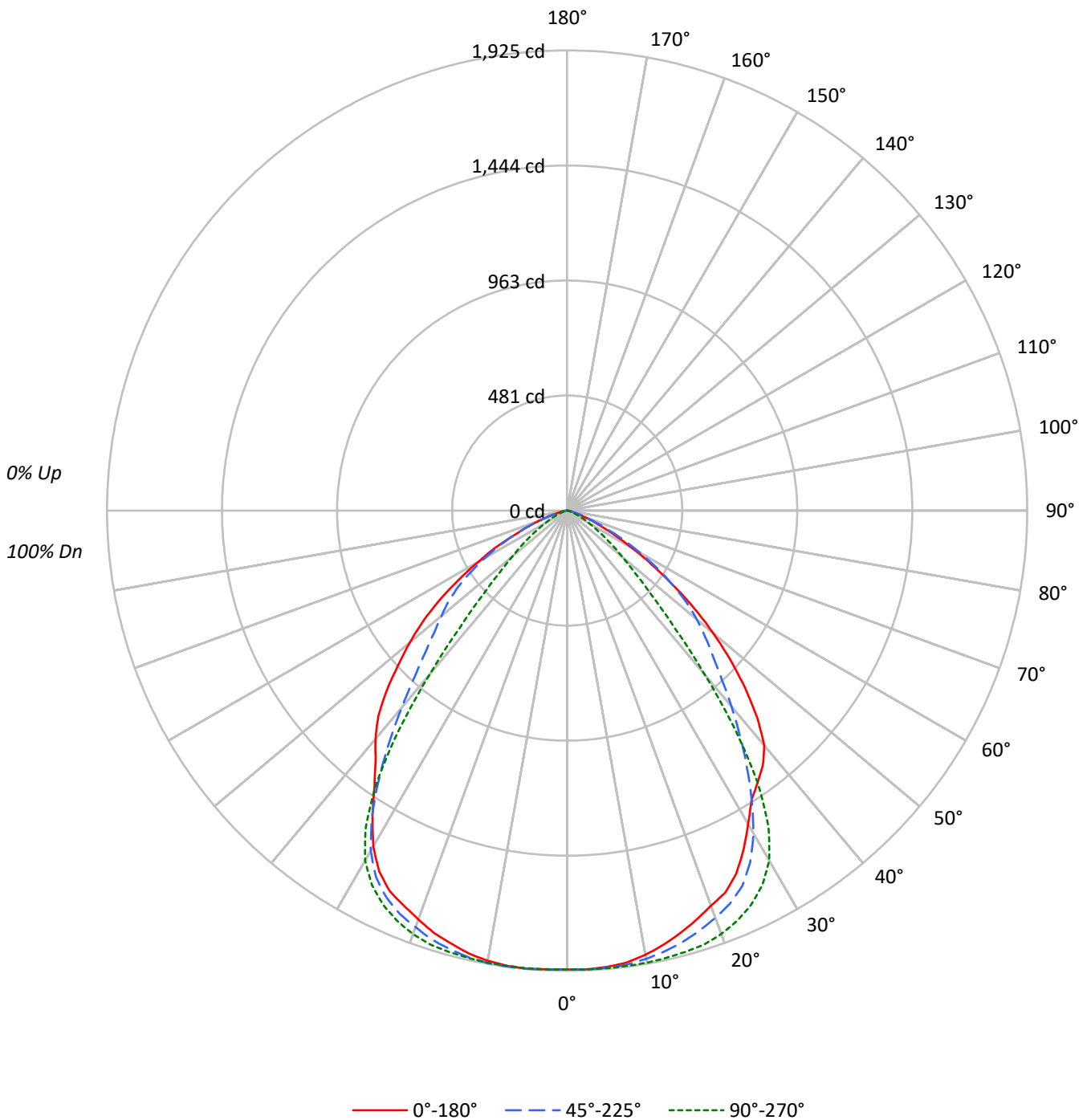
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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°	183.2	5.0
10°-20°	532.0	14.6
20°-30°	807.5	22.2
30°-40°	848.1	23.3
40°-50°	635.8	17.5
50°-60°	408.0	11.2
60°-70°	174.5	4.8
70°-80°	41.2	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°	1522.7	41.9
0°-40°	2370.8	65.2
0°-60°	3414.6	93.9
0°-90°	3638.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3638.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1920	1920	1920	1920	1920	
5°	1916	1920	1922	1925	1924	182
15°	1830	1868	1911	1899	1875	516
25°	1674	1733	1821	1788	1757	765
35°	1389	1312	1390	1373	1404	872
45°	1055	862	496	838	1070	808
55°	534	534	184	556	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°	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5
2.5°	1920.5	1922.6	1921.5	1921.5	1920.5	1921.5	1921.5	1923.6	1923.6	1921.5	1920.5
5°	1916.4	1918.4	1918.4	1916.4	1916.4	1921.5	1918.4	1920.5	1920.5	1919.5	1919.5
7.5°	1907.1	1907.1	1911.2	1908.2	1908.2	1911.2	1910.2	1912.3	1914.3	1915.4	1915.4
10°	1886.5	1888.6	1889.6	1889.6	1890.6	1893.7	1895.8	1899.9	1902.0	1904.0	1905.1
12.5°	1860.8	1863.8	1864.9	1863.8	1866.9	1871.1	1876.2	1881.4	1884.5	1888.6	1891.7
15°	1829.8	1829.8	1831.9	1835.0	1837.1	1843.2	1848.4	1854.6	1862.8	1868.0	1873.1
17.5°	1795.8	1797.9	1801.0	1801.0	1805.1	1815.4	1818.5	1827.8	1837.1	1842.2	1852.5
20°	1758.8	1760.8	1763.9	1766.0	1771.1	1779.4	1785.5	1793.8	1804.1	1813.4	1823.7
22.5°	1729.9	1725.8	1727.8	1729.9	1735.1	1742.3	1749.5	1759.8	1770.1	1779.4	1789.7
25°	1674.3	1675.3	1678.4	1680.4	1686.6	1692.8	1701.1	1713.4	1722.7	1733.0	1744.3
27.5°	1599.1	1600.1	1605.2	1605.2	1610.4	1620.7	1625.8	1636.1	1648.5	1658.8	1672.2
30°	1513.5	1515.6	1515.6	1519.7	1522.8	1528.0	1533.1	1543.4	1549.6	1558.9	1577.4
32.5°	1435.2	1437.3	1436.3	1435.2	1432.1	1431.1	1430.1	1432.1	1434.2	1437.3	1444.5
35°	1388.9	1383.7	1379.6	1372.4	1364.1	1353.8	1344.6	1332.2	1320.9	1311.6	1301.3
37.5°	1344.6	1343.5	1337.4	1327.0	1310.6	1292.0	1270.4	1243.6	1216.8	1188.0	1160.1
40°	1282.7	1279.6	1274.5	1260.1	1241.5	1218.9	1190.0	1157.0	1113.8	1069.5	1024.1
42.5°	1177.6	1178.7	1172.5	1161.2	1143.7	1122.0	1092.1	1056.1	1009.7	957.2	898.4
45°	1055.0	1055.0	1053.0	1043.7	1031.3	1013.8	991.2	961.3	916.0	862.4	799.5
47.5°	927.3	928.3	925.2	923.2	918.0	906.7	890.2	867.5	835.6	784.1	721.2
50°	797.5	797.5	802.6	801.6	801.6	797.5	790.3	776.9	749.0	707.8	649.1
52.5°	667.6	669.7	672.8	676.9	682.1	690.3	682.1	675.9	658.4	626.4	576.0
55°	533.7	535.8	540.9	548.1	554.3	562.6	564.6	564.6	555.3	533.7	495.6
57.5°	419.3	416.2	420.4	426.6	434.8	443.0	449.2	456.4	455.4	441.0	410.1
60°	315.3	316.3	319.4	325.6	331.8	339.0	347.2	353.4	356.5	349.3	329.7
62.5°	229.8	229.8	233.9	240.1	243.2	253.5	258.6	261.7	264.8	263.7	251.4
65°	160.7	162.8	164.8	168.0	171.0	177.2	180.3	186.5	188.5	189.6	180.3
67.5°	113.3	110.2	112.3	114.4	117.5	121.6	127.8	127.8	130.8	130.8	124.7
70°	72.1	72.1	73.2	76.2	78.3	79.3	81.4	83.4	86.5	85.5	85.5
72.5°	48.4	47.4	48.4	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	28.8	31.9	30.9	28.8	28.8
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°	11.3	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°	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5
2.5°	1922.6	1921.5	1923.6	1922.6	1922.6	1921.5	1922.6	1921.5	1923.6	1919.5	1920.5
5°	1922.6	1920.5	1921.5	1922.6	1923.6	1921.5	1921.5	1921.5	1923.6	1921.5	1922.6
7.5°	1918.4	1917.4	1920.5	1922.6	1921.5	1920.5	1922.6	1921.5	1923.6	1922.6	1924.6
10°	1910.2	1911.2	1913.3	1916.4	1917.4	1918.4	1920.5	1920.5	1923.6	1919.5	1921.5
12.5°	1897.8	1902.0	1907.1	1909.2	1913.3	1913.3	1915.4	1916.4	1918.4	1917.4	1920.5
15°	1882.4	1887.5	1893.7	1898.9	1904.0	1907.1	1910.2	1911.2	1914.3	1911.2	1912.3
17.5°	1863.8	1870.0	1879.3	1885.5	1893.7	1896.8	1900.9	1903.0	1906.1	1904.0	1905.1
20°	1838.1	1845.3	1855.6	1864.9	1870.0	1877.2	1882.4	1885.5	1887.5	1885.5	1886.5
22.5°	1802.0	1812.3	1825.7	1832.9	1843.2	1849.4	1850.5	1857.7	1862.8	1857.7	1859.7
25°	1759.8	1770.1	1780.4	1795.8	1805.1	1812.3	1819.5	1820.6	1825.7	1824.7	1823.7
27.5°	1689.7	1703.1	1720.6	1733.0	1745.4	1756.7	1764.9	1767.0	1772.2	1770.1	1771.1
30°	1593.9	1608.3	1624.8	1644.4	1661.9	1673.2	1683.5	1690.7	1695.9	1692.8	1691.8
32.5°	1457.9	1472.3	1489.8	1509.4	1530.0	1546.5	1558.9	1568.2	1574.3	1572.3	1567.1
35°	1302.3	1306.4	1317.8	1333.2	1350.7	1368.3	1379.6	1389.9	1397.1	1399.2	1399.2
37.5°	1142.6	1129.2	1121.0	1121.0	1131.3	1138.5	1148.8	1155.0	1166.3	1170.4	1173.5
40°	988.1	957.2	928.3	906.7	892.3	891.2	891.2	894.3	904.6	918.0	930.4
42.5°	850.0	800.6	756.3	716.1	687.2	670.7	663.5	664.6	672.8	685.2	705.8
45°	739.8	678.0	622.3	573.9	534.7	509.0	496.6	495.6	501.8	516.2	538.9
47.5°	654.3	588.3	525.5	469.8	427.6	399.8	385.3	381.2	385.3	398.7	425.5
50°	583.2	515.2	450.3	392.5	347.2	318.4	305.0	299.8	305.0	316.3	343.1
52.5°	517.2	447.2	386.4	330.7	282.3	257.6	243.2	240.1	243.2	256.5	278.2
55°	441.0	381.2	321.5	265.8	223.6	198.9	187.5	184.4	187.5	199.9	222.6
57.5°	365.8	314.2	261.7	211.2	175.2	153.5	143.2	139.1	146.3	154.5	181.3
60°	295.7	254.5	210.2	165.9	136.0	116.4	108.2	107.1	109.2	119.5	138.1
62.5°	231.8	197.8	162.8	126.7	102.0	93.8	83.4	82.4	84.5	90.7	105.1
65°	166.9	145.3	118.5	92.7	73.2	61.8	57.7	58.7	60.8	64.9	78.3
67.5°	116.4	101.0	82.4	64.9	50.5	45.3	41.2	40.2	41.2	48.4	55.6
70°	78.3	69.0	55.6	49.5	35.0	27.8	28.8	25.8	29.9	29.9	36.1
72.5°	51.5	45.3	37.1	28.8	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	11.3	10.3	8.2	8.2	8.2	8.2	9.3	10.3
80°	11.3	11.3	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°	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5	1919.5
2.5°	1922.6	1923.6	1923.6	1922.6	1922.6	1920.5	1924.6	1921.5	1922.6	1926.7	1923.6
5°	1924.6	1925.7	1925.7	1924.6	1924.6	1924.6	1925.7	1925.7	1924.6	1923.6	1925.7
7.5°	1928.8	1927.7	1927.7	1925.7	1925.7	1923.6	1925.7	1922.6	1924.6	1922.6	1925.7
10°	1923.6	1924.6	1923.6	1922.6	1922.6	1921.5	1921.5	1918.4	1919.5	1916.4	1918.4
12.5°	1920.5	1919.5	1919.5	1917.4	1915.4	1913.3	1912.3	1909.2	1909.2	1902.0	1905.1
15°	1912.3	1913.3	1910.2	1906.1	1904.0	1898.9	1896.8	1892.7	1888.6	1883.4	1884.5
17.5°	1905.1	1902.0	1897.8	1893.7	1885.5	1881.4	1877.2	1871.1	1869.0	1862.8	1860.8
20°	1883.4	1881.4	1876.2	1869.0	1863.8	1854.6	1850.5	1844.3	1839.1	1832.9	1829.8
22.5°	1855.6	1853.5	1847.4	1840.1	1831.9	1827.8	1823.7	1812.3	1807.2	1801.0	1800.0
25°	1820.6	1817.5	1811.3	1803.1	1798.9	1787.6	1783.5	1775.2	1773.2	1767.0	1766.0
27.5°	1767.0	1762.9	1755.7	1745.4	1738.1	1730.9	1726.8	1720.6	1718.6	1712.4	1711.4
30°	1686.6	1681.5	1667.1	1662.9	1650.6	1643.4	1643.4	1635.1	1636.1	1632.0	1632.0
32.5°	1559.9	1551.7	1540.3	1532.1	1523.8	1519.7	1519.7	1516.6	1518.7	1518.7	1520.8
35°	1392.0	1380.6	1374.4	1369.3	1369.3	1373.4	1385.8	1388.9	1395.1	1400.2	1404.3
37.5°	1176.6	1175.6	1182.8	1189.0	1204.4	1222.0	1243.6	1262.1	1279.6	1292.0	1304.4
40°	943.8	969.5	990.1	1019.0	1042.7	1076.7	1115.8	1147.8	1177.6	1199.3	1222.0
42.5°	736.7	769.6	812.9	855.2	897.4	943.8	995.3	1039.6	1078.7	1108.6	1132.3
45°	573.9	619.2	671.8	725.3	780.0	837.7	891.2	936.6	977.8	1008.7	1032.4
47.5°	462.6	512.1	571.8	630.6	692.4	753.2	812.9	852.1	886.1	910.8	932.4
50°	382.2	434.8	497.6	564.6	626.4	687.2	738.7	776.9	804.7	826.3	839.7
52.5°	319.4	375.0	442.0	509.0	570.8	626.4	672.8	701.7	724.3	739.8	752.1
55°	263.7	317.3	380.2	443.0	503.8	556.4	594.5	616.1	633.6	642.9	650.1
57.5°	215.3	264.8	322.5	380.2	432.7	476.0	505.9	527.5	535.8	543.0	541.9
60°	169.0	215.3	267.9	317.3	362.7	397.7	419.3	431.7	437.9	441.0	438.9
62.5°	132.9	175.2	215.3	258.6	291.6	321.5	342.1	342.1	345.2	346.2	349.3
65°	98.9	130.8	165.9	197.8	224.6	244.2	255.5	258.6	262.7	261.7	259.6
67.5°	73.2	96.9	122.6	146.3	164.8	177.2	185.4	192.7	191.6	189.6	188.5
70°	50.5	65.9	88.6	103.0	116.4	128.8	130.8	131.9	132.9	133.9	131.9
72.5°	35.0	46.4	58.7	71.1	79.3	84.5	89.6	90.7	90.7	90.7	89.6
75°	17.5	23.7	35.0	40.2	47.4	49.5	53.6	53.6	56.7	52.5	51.5
77.5°	15.5	18.6	24.7	28.8	31.9	35.0	36.1	39.2	38.1	36.1	37.1
80°	9.3	11.3	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: P246173

CATALOG NUMBER: LSR8B50D010 EC8B509730 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1919.5	1919.5	1919.5	1919.5
2.5°	1922.6	1924.6	1921.5	1920.5
5°	1925.7	1925.7	1923.6	1923.6
7.5°	1925.7	1925.7	1922.6	1920.5
10°	1917.4	1917.4	1914.3	1912.3
12.5°	1902.0	1902.0	1900.9	1897.8
15°	1882.4	1882.4	1878.3	1875.2
17.5°	1855.6	1857.7	1852.5	1852.5
20°	1826.8	1825.7	1821.6	1819.5
22.5°	1796.9	1794.8	1793.8	1787.6
25°	1764.9	1762.9	1759.8	1756.7
27.5°	1710.3	1709.3	1706.2	1702.1
30°	1626.9	1625.8	1621.7	1621.7
32.5°	1518.7	1517.7	1513.5	1514.6
35°	1406.4	1410.5	1408.4	1404.3
37.5°	1312.6	1315.7	1317.8	1315.7
40°	1234.3	1243.6	1244.6	1246.7
42.5°	1150.9	1163.2	1167.4	1169.4
45°	1050.9	1062.3	1071.5	1069.5
47.5°	948.9	957.2	965.4	959.2
50°	851.0	856.2	859.3	859.3
52.5°	758.3	758.3	757.3	758.3
55°	652.2	652.2	648.1	650.1
57.5°	540.9	543.0	539.9	534.7
60°	437.9	432.7	430.7	427.6
62.5°	341.0	341.0	333.8	343.1
65°	255.5	252.4	249.3	248.3
67.5°	185.4	184.4	181.3	180.3
70°	130.8	126.7	125.7	123.6
72.5°	87.6	87.6	85.5	85.5
75°	53.6	48.4	47.4	48.4
77.5°	37.1	36.1	36.1	35.0
80°	24.7	23.7	25.8	22.7
82.5°	15.5	16.5	15.5	16.5
85°	10.3	12.4	11.3	11.3
87.5°	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)