

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: P246124

Luminaire Tested: **LSR8B40D010 EC8B40840 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246124
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: LSR8B40D010 EC8B40840 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3922.0 lumens
Efficiency: N/A
Efficacy: 95.9 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

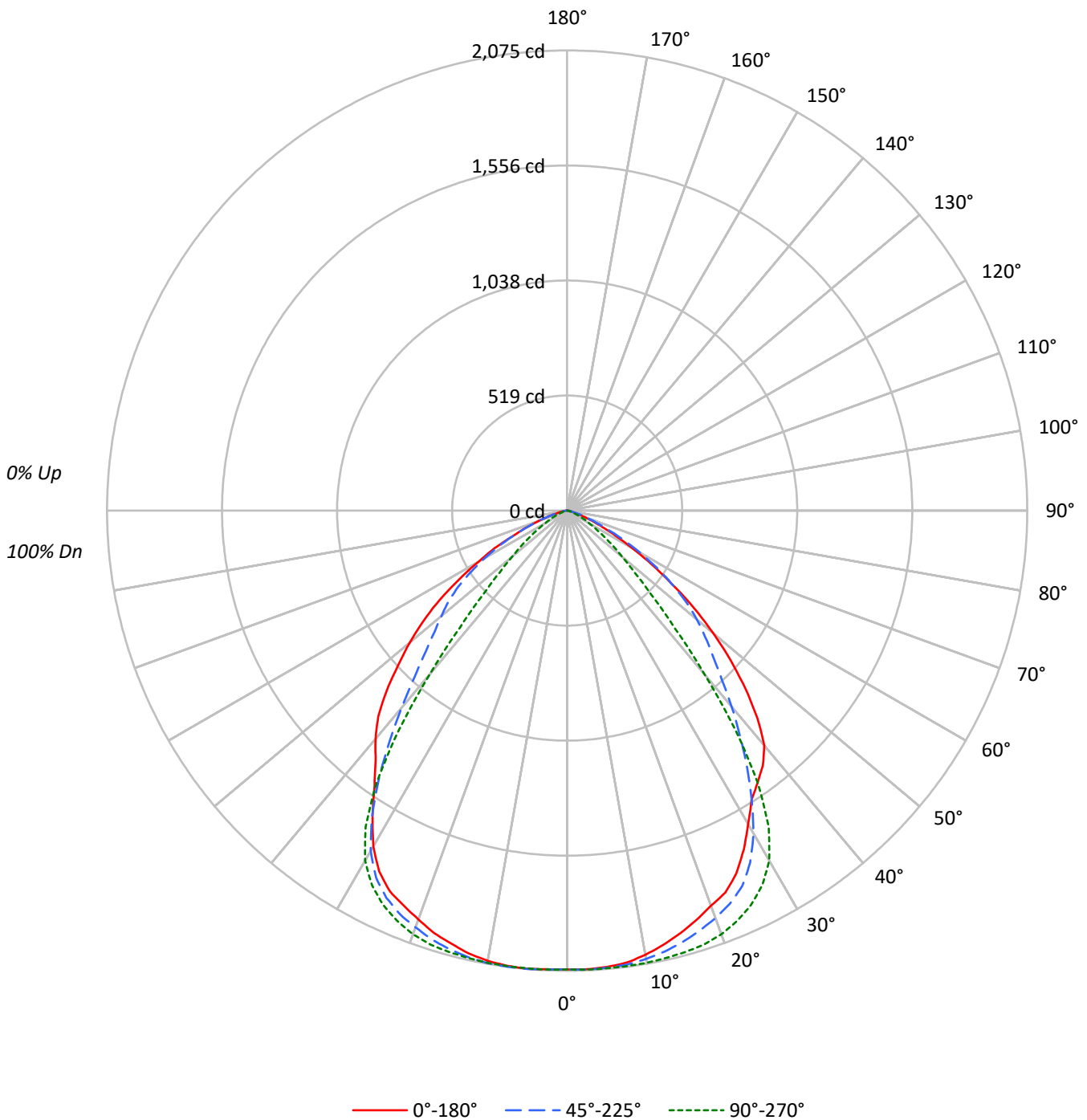
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	63810	63810	63810
5°	63951	64125	64193
10°	63682	64828	64553
15°	62977	65776	64538
20°	62221	66704	64371
25°	61414	66779	64435
30°	58099	64900	62251
35°	56365	56406	56993
40°	55667	38809	54101
45°	49601	23300	50281
50°	41242	15505	44442
55°	30934	10688	37681
60°	20963	7123	28431
65°	12645	4619	19533
70°	7014	2506	12018
75°	3181	1060	6219
80°	2752	1190	4333
85°	3149	1557	4316



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.5	5.0
10°-20°	573.5	14.6
20°-30°	870.5	22.2
30°-40°	914.3	23.3
40°-50°	685.5	17.5
50°-60°	439.8	11.2
60°-70°	188.1	4.8
70°-80°	44.5	1.1
80°-90°	8.3	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°	1641.5	41.9
0°-40°	2555.8	65.2
0°-60°	3681.1	93.9
0°-90°	3922.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3922.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2069	2069	2069	2069	2069	
5°	2066	2069	2072	2075	2074	196
15°	1973	2014	2060	2047	2022	556
25°	1805	1868	1963	1927	1894	825
35°	1497	1414	1498	1481	1514	940
45°	1137	930	534	903	1153	871
55°	575	575	199	600	701	522
65°	173	204	63	263	268	185
75°	27	31	9	53	52	39
85°	9	6	4	9	12	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°	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3
2.5°	2070.4	2072.7	2071.6	2071.6	2070.4	2071.6	2071.6	2073.8	2073.8	2071.6	2070.4
5°	2066.0	2068.2	2068.2	2066.0	2066.0	2071.6	2068.2	2070.4	2070.4	2069.3	2069.3
7.5°	2056.0	2056.0	2060.4	2057.1	2057.1	2060.4	2059.3	2061.6	2063.8	2064.9	2064.9
10°	2033.8	2036.0	2037.1	2037.1	2038.2	2041.5	2043.8	2048.2	2050.4	2052.7	2053.8
12.5°	2006.0	2009.3	2010.5	2009.3	2012.7	2017.1	2022.7	2028.2	2031.6	2036.0	2039.3
15°	1972.7	1972.7	1974.9	1978.2	1980.5	1987.1	1992.7	1999.3	2008.2	2013.8	2019.3
17.5°	1936.0	1938.3	1941.6	1941.6	1946.0	1957.1	1960.5	1970.5	1980.5	1986.0	1997.1
20°	1896.1	1898.3	1901.6	1903.8	1909.4	1918.3	1924.9	1933.8	1944.9	1954.9	1966.0
22.5°	1864.9	1860.5	1862.7	1864.9	1870.5	1878.3	1886.1	1897.2	1908.3	1918.3	1929.4
25°	1805.0	1806.1	1809.4	1811.6	1818.3	1825.0	1833.9	1847.2	1857.2	1868.3	1880.5
27.5°	1723.9	1725.0	1730.5	1730.5	1736.1	1747.2	1752.8	1763.9	1777.2	1788.3	1802.8
30°	1631.7	1633.9	1633.9	1638.4	1641.7	1647.2	1652.8	1663.9	1670.6	1680.6	1700.6
32.5°	1547.3	1549.5	1548.4	1547.3	1543.9	1542.8	1541.7	1543.9	1546.2	1549.5	1557.3
35°	1497.3	1491.7	1487.3	1479.5	1470.6	1459.5	1449.5	1436.2	1424.0	1414.0	1402.9
37.5°	1449.5	1448.4	1441.8	1430.6	1412.9	1392.9	1369.6	1340.7	1311.8	1280.7	1250.7
40°	1382.9	1379.5	1374.0	1358.4	1338.4	1314.0	1282.9	1247.4	1200.7	1153.0	1104.1
42.5°	1269.6	1270.7	1264.0	1251.8	1232.9	1209.6	1177.4	1138.5	1088.5	1031.9	968.6
45°	1137.4	1137.4	1135.2	1125.2	1111.9	1093.0	1068.5	1036.3	987.5	929.7	861.9
47.5°	999.7	1000.8	997.4	995.2	989.7	977.5	959.7	935.3	900.8	845.3	777.5
50°	859.7	859.7	865.3	864.2	864.2	859.7	852.0	837.5	807.5	763.1	699.8
52.5°	719.8	722.0	725.3	729.8	735.3	744.2	735.3	728.6	709.8	675.3	620.9
55°	575.4	577.6	583.1	590.9	597.6	606.5	608.7	608.7	598.7	575.4	534.3
57.5°	452.1	448.7	453.2	459.9	468.7	477.6	484.3	492.1	490.9	475.4	442.1
60°	339.9	341.0	344.3	351.0	357.7	365.4	374.3	381.0	384.3	376.6	355.4
62.5°	247.7	247.7	252.1	258.8	262.1	273.2	278.8	282.1	285.5	284.3	271.0
65°	173.3	175.5	177.7	181.1	184.4	191.0	194.4	201.0	203.3	204.4	194.4
67.5°	122.2	118.9	121.1	123.3	126.6	131.1	137.7	137.7	141.1	141.1	134.4
70°	77.8	77.8	78.9	82.2	84.4	85.5	87.8	90.0	93.3	92.2	92.2
72.5°	52.2	51.1	52.2	53.3	54.4	57.8	57.8	58.9	61.1	62.2	57.8
75°	26.7	27.8	30.0	28.9	32.2	30.0	31.1	34.4	33.3	31.1	31.1
77.5°	22.2	22.2	22.2	21.1	23.3	23.3	22.2	24.4	23.3	23.3	22.2
80°	15.5	16.7	15.5	14.4	15.5	14.4	14.4	14.4	14.4	14.4	13.3
82.5°	12.2	10.0	11.1	10.0	11.1	11.1	10.0	8.9	8.9	10.0	8.9
85°	8.9	6.7	7.8	7.8	6.7	6.7	6.7	6.7	6.7	5.5	5.5
87.5°	5.5	3.3	3.3	3.3	4.4	4.4	4.4	3.3	4.4	4.4	2.2
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°	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3
2.5°	2072.7	2071.6	2073.8	2072.7	2072.7	2071.6	2072.7	2071.6	2073.8	2069.3	2070.4
5°	2072.7	2070.4	2071.6	2072.7	2073.8	2071.6	2071.6	2071.6	2073.8	2071.6	2072.7
7.5°	2068.2	2067.1	2070.4	2072.7	2071.6	2070.4	2072.7	2071.6	2073.8	2072.7	2074.9
10°	2059.3	2060.4	2062.7	2066.0	2067.1	2068.2	2070.4	2070.4	2073.8	2069.3	2071.6
12.5°	2046.0	2050.4	2056.0	2058.2	2062.7	2062.7	2064.9	2066.0	2068.2	2067.1	2070.4
15°	2029.3	2034.9	2041.5	2047.1	2052.7	2056.0	2059.3	2060.4	2063.8	2060.4	2061.6
17.5°	2009.3	2016.0	2026.0	2032.7	2041.5	2044.9	2049.3	2051.5	2054.9	2052.7	2053.8
20°	1981.6	1989.4	2000.5	2010.5	2016.0	2023.8	2029.3	2032.7	2034.9	2032.7	2033.8
22.5°	1942.7	1953.8	1968.2	1976.0	1987.1	1993.8	1994.9	2002.7	2008.2	2002.7	2004.9
25°	1897.2	1908.3	1919.4	1936.0	1946.0	1953.8	1961.6	1962.7	1968.2	1967.1	1966.0
27.5°	1821.6	1836.1	1854.9	1868.3	1881.6	1893.8	1902.7	1904.9	1910.5	1908.3	1909.4
30°	1718.3	1733.9	1751.7	1772.8	1791.6	1803.8	1815.0	1822.7	1828.3	1825.0	1823.9
32.5°	1571.7	1587.3	1606.2	1627.2	1649.5	1667.2	1680.6	1690.6	1697.2	1695.0	1689.5
35°	1404.0	1408.4	1420.7	1437.3	1456.2	1475.1	1487.3	1498.4	1506.2	1508.4	1508.4
37.5°	1231.8	1217.4	1208.5	1208.5	1219.6	1227.4	1238.5	1245.1	1257.4	1261.8	1265.1
40°	1065.2	1031.9	1000.8	977.5	961.9	960.8	960.8	964.1	975.2	989.7	1003.0
42.5°	916.4	863.0	815.3	772.0	740.9	723.1	715.3	716.4	725.3	738.7	760.9
45°	797.5	730.9	670.9	618.7	576.5	548.7	535.4	534.3	540.9	556.5	580.9
47.5°	705.3	634.2	566.5	506.5	461.0	431.0	415.4	411.0	415.4	429.9	458.7
50°	628.7	555.4	485.4	423.2	374.3	343.2	328.8	323.2	328.8	341.0	369.9
52.5°	557.6	482.1	416.5	356.6	304.3	277.7	262.1	258.8	262.1	276.6	299.9
55°	475.4	411.0	346.5	286.6	241.0	214.4	202.2	198.8	202.2	215.5	239.9
57.5°	394.3	338.8	282.1	227.7	188.8	165.5	154.4	149.9	157.7	166.6	195.5
60°	318.8	274.4	226.6	178.8	146.6	125.5	116.6	115.5	117.7	128.9	148.8
62.5°	249.9	213.3	175.5	136.6	110.0	101.1	90.0	88.9	91.1	97.7	113.3
65°	179.9	156.6	127.7	100.0	78.9	66.6	62.2	63.3	65.5	70.0	84.4
67.5°	125.5	108.8	88.9	70.0	54.4	48.9	44.4	43.3	44.4	52.2	60.0
70°	84.4	74.4	60.0	53.3	37.8	30.0	31.1	27.8	32.2	32.2	38.9
72.5°	55.5	48.9	40.0	31.1	26.7	21.1	21.1	20.0	22.2	23.3	28.9
75°	28.9	22.2	22.2	15.5	11.1	5.5	10.0	8.9	7.8	8.9	11.1
77.5°	20.0	16.7	15.5	12.2	11.1	8.9	8.9	8.9	8.9	10.0	11.1
80°	12.2	12.2	8.9	7.8	6.7	5.5	6.7	6.7	6.7	6.7	7.8
82.5°	7.8	6.7	6.7	5.5	5.5	4.4	4.4	4.4	4.4	4.4	6.7
85°	6.7	4.4	4.4	3.3	4.4	7.8	3.3	4.4	4.4	4.4	3.3
87.5°	2.2	3.3	3.3	3.3	2.2	1.1	2.2	3.3	3.3	5.5	4.4
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°	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3	2069.3
2.5°	2072.7	2073.8	2073.8	2072.7	2072.7	2070.4	2074.9	2071.6	2072.7	2077.1	2073.8
5°	2074.9	2076.0	2076.0	2074.9	2074.9	2074.9	2076.0	2076.0	2074.9	2073.8	2076.0
7.5°	2079.3	2078.2	2078.2	2076.0	2076.0	2073.8	2076.0	2072.7	2074.9	2072.7	2076.0
10°	2073.8	2074.9	2073.8	2072.7	2072.7	2071.6	2071.6	2068.2	2069.3	2066.0	2068.2
12.5°	2070.4	2069.3	2069.3	2067.1	2064.9	2062.7	2061.6	2058.2	2058.2	2050.4	2053.8
15°	2061.6	2062.7	2059.3	2054.9	2052.7	2047.1	2044.9	2040.4	2036.0	2030.5	2031.6
17.5°	2053.8	2050.4	2046.0	2041.5	2032.7	2028.2	2023.8	2017.1	2014.9	2008.2	2006.0
20°	2030.5	2028.2	2022.7	2014.9	2009.3	1999.3	1994.9	1988.3	1982.7	1976.0	1972.7
22.5°	2000.5	1998.2	1991.6	1983.8	1974.9	1970.5	1966.0	1953.8	1948.2	1941.6	1940.5
25°	1962.7	1959.4	1952.7	1943.8	1939.4	1927.2	1922.7	1913.8	1911.6	1904.9	1903.8
27.5°	1904.9	1900.5	1892.7	1881.6	1873.8	1866.1	1861.6	1854.9	1852.7	1846.1	1845.0
30°	1818.3	1812.7	1797.2	1792.8	1779.4	1771.6	1771.6	1762.8	1763.9	1759.4	1759.4
32.5°	1681.7	1672.8	1660.6	1651.7	1642.8	1638.4	1638.4	1635.0	1637.2	1637.2	1639.5
35°	1500.6	1488.4	1481.7	1476.2	1476.2	1480.6	1494.0	1497.3	1504.0	1509.5	1514.0
37.5°	1268.5	1267.4	1275.1	1281.8	1298.5	1317.4	1340.7	1360.7	1379.5	1392.9	1406.2
40°	1017.4	1045.2	1067.4	1098.5	1124.1	1160.7	1202.9	1237.4	1269.6	1292.9	1317.4
42.5°	794.2	829.7	876.4	921.9	967.5	1017.4	1073.0	1120.7	1163.0	1195.2	1220.7
45°	618.7	667.6	724.2	782.0	840.8	903.1	960.8	1009.7	1054.1	1087.4	1113.0
47.5°	498.7	552.0	616.5	679.8	746.4	812.0	876.4	918.6	955.2	981.9	1005.2
50°	412.1	468.7	536.5	608.7	675.3	740.9	796.4	837.5	867.5	890.8	905.3
52.5°	344.3	404.3	476.5	548.7	615.3	675.3	725.3	756.4	780.9	797.5	810.8
55°	284.3	342.1	409.9	477.6	543.2	599.8	640.9	664.2	683.1	693.1	700.9
57.5°	232.2	285.5	347.7	409.9	466.5	513.2	545.4	568.7	577.6	585.4	584.3
60°	182.2	232.2	288.8	342.1	391.0	428.7	452.1	465.4	472.1	475.4	473.2
62.5°	143.3	188.8	232.2	278.8	314.3	346.5	368.8	368.8	372.1	373.2	376.6
65°	106.6	141.1	178.8	213.3	242.1	263.2	275.5	278.8	283.3	282.1	279.9
67.5°	78.9	104.4	132.2	157.7	177.7	191.0	199.9	207.7	206.6	204.4	203.3
70°	54.4	71.1	95.5	111.1	125.5	138.9	141.1	142.2	143.3	144.4	142.2
72.5°	37.8	50.0	63.3	76.6	85.5	91.1	96.6	97.7	97.7	97.7	96.6
75°	18.9	25.5	37.8	43.3	51.1	53.3	57.8	57.8	61.1	56.6	55.5
77.5°	16.7	20.0	26.7	31.1	34.4	37.8	38.9	42.2	41.1	38.9	40.0
80°	10.0	12.2	16.7	18.9	23.3	24.4	25.5	26.7	25.5	26.7	26.7
82.5°	7.8	8.9	11.1	11.1	14.4	14.4	15.5	15.5	16.7	16.7	16.7
85°	4.4	7.8	6.7	13.3	8.9	8.9	11.1	13.3	11.1	11.1	13.3
87.5°	4.4	4.4	3.3	4.4	4.4	4.4	5.5	6.7	6.7	7.8	6.7
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: P246124

CATALOG NUMBER: LSR8B40D010 EC8B40840 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2069.3	2069.3	2069.3	2069.3
2.5°	2072.7	2074.9	2071.6	2070.4
5°	2076.0	2076.0	2073.8	2073.8
7.5°	2076.0	2076.0	2072.7	2070.4
10°	2067.1	2067.1	2063.8	2061.6
12.5°	2050.4	2050.4	2049.3	2046.0
15°	2029.3	2029.3	2024.9	2021.6
17.5°	2000.5	2002.7	1997.1	1997.1
20°	1969.4	1968.2	1963.8	1961.6
22.5°	1937.2	1934.9	1933.8	1927.2
25°	1902.7	1900.5	1897.2	1893.8
27.5°	1843.9	1842.7	1839.4	1835.0
30°	1753.9	1752.8	1748.3	1748.3
32.5°	1637.2	1636.1	1631.7	1632.8
35°	1516.2	1520.6	1518.4	1514.0
37.5°	1415.1	1418.4	1420.7	1418.4
40°	1330.7	1340.7	1341.8	1344.0
42.5°	1240.7	1254.0	1258.5	1260.7
45°	1133.0	1145.2	1155.2	1153.0
47.5°	1023.0	1031.9	1040.8	1034.1
50°	917.5	923.0	926.4	926.4
52.5°	817.5	817.5	816.4	817.5
55°	703.1	703.1	698.7	700.9
57.5°	583.1	585.4	582.0	576.5
60°	472.1	466.5	464.3	461.0
62.5°	367.7	367.7	359.9	369.9
65°	275.5	272.1	268.8	267.7
67.5°	199.9	198.8	195.5	194.4
70°	141.1	136.6	135.5	133.3
72.5°	94.4	94.4	92.2	92.2
75°	57.8	52.2	51.1	52.2
77.5°	40.0	38.9	38.9	37.8
80°	26.7	25.5	27.8	24.4
82.5°	16.7	17.8	16.7	17.8
85°	11.1	13.3	12.2	12.2
87.5°	6.7	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)