

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: P246112

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246112
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 EC8B40830 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3796.0 lumens
Efficiency: N/A
Efficacy: 92.8 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

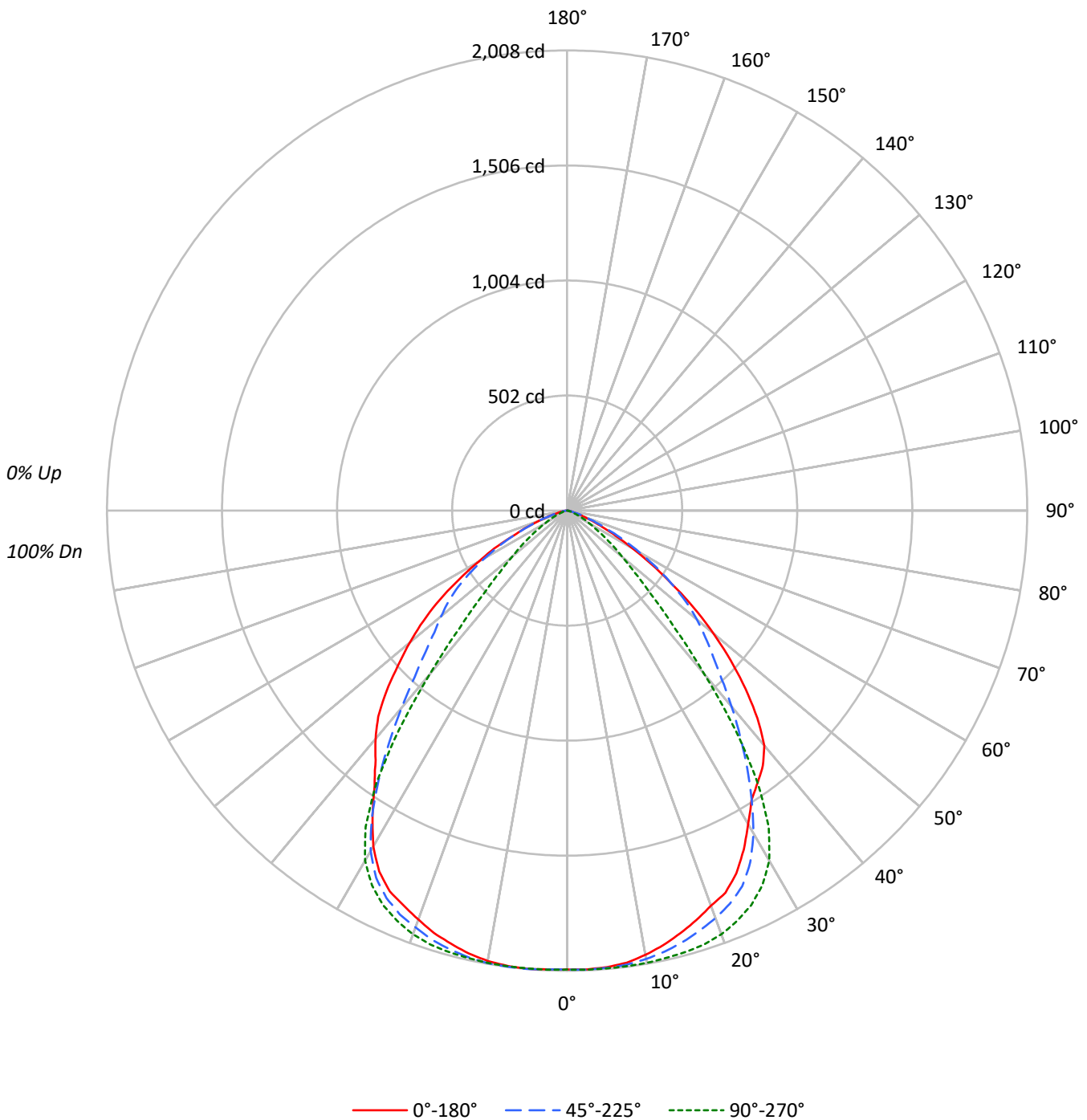
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	61759	61759	61759
5°	61896	62063	62131
10°	61635	62746	62477
15°	60953	63663	62463
20°	60219	64561	62303
25°	59440	64632	62366
30°	56234	62817	60254
35°	54554	54595	55160
40°	53880	37561	52362
45°	48009	22550	48663
50°	39918	15006	43012
55°	29940	10344	36472
60°	20290	6895	27518
65°	12236	4473	18905
70°	6789	2425	11631
75°	3074	1025	6017
80°	2664	1137	4191
85°	3043	1521	4175



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.1	5.0
10°-20°	555.1	14.6
20°-30°	842.5	22.2
30°-40°	884.9	23.3
40°-50°	663.5	17.5
50°-60°	425.7	11.2
60°-70°	182.1	4.8
70°-80°	43.0	1.1
80°-90°	8.0	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°	1588.8	41.9
0°-40°	2473.7	65.2
0°-60°	3562.9	93.9
0°-90°	3796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3796.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2003	2003	2003	2003	2003	
5°	2000	2003	2005	2008	2007	190
15°	1909	1949	1994	1981	1957	539
25°	1747	1808	1900	1865	1833	798
35°	1449	1368	1450	1433	1465	910
45°	1101	900	517	874	1116	843
55°	557	557	192	580	678	505
65°	168	198	61	255	259	179
75°	26	30	9	52	50	38
85°	9	5	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°	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8
2.5°	2003.9	2006.1	2005.0	2005.0	2003.9	2005.0	2005.0	2007.2	2007.2	2005.0	2003.9
5°	1999.6	2001.8	2001.8	1999.6	1999.6	2005.0	2001.8	2003.9	2003.9	2002.8	2002.8
7.5°	1990.0	1990.0	1994.2	1991.0	1991.0	1994.2	1993.2	1995.3	1997.5	1998.6	1998.6
10°	1968.4	1970.6	1971.7	1971.7	1972.8	1976.0	1978.1	1982.4	1984.6	1986.7	1987.8
12.5°	1941.6	1944.8	1945.9	1944.8	1948.0	1952.3	1957.7	1963.1	1966.3	1970.6	1973.8
15°	1909.3	1909.3	1911.5	1914.7	1916.9	1923.3	1928.7	1935.1	1943.7	1949.1	1954.5
17.5°	1873.8	1876.0	1879.2	1879.2	1883.5	1894.3	1897.5	1907.2	1916.9	1922.2	1933.0
20°	1835.1	1837.3	1840.5	1842.7	1848.0	1856.6	1863.1	1871.7	1882.4	1892.1	1902.9
22.5°	1805.0	1800.7	1802.9	1805.0	1810.4	1817.9	1825.5	1836.2	1847.0	1856.6	1867.4
25°	1747.0	1748.1	1751.3	1753.4	1759.9	1766.3	1774.9	1787.8	1797.5	1808.3	1820.1
27.5°	1668.5	1669.6	1675.0	1675.0	1680.3	1691.1	1696.4	1707.2	1720.1	1730.8	1744.8
30°	1579.3	1581.4	1581.4	1585.7	1588.9	1594.3	1599.7	1610.5	1616.9	1626.6	1645.9
32.5°	1497.6	1499.7	1498.6	1497.6	1494.3	1493.3	1492.2	1494.3	1496.5	1499.7	1507.2
35°	1449.2	1443.8	1439.5	1432.0	1423.4	1412.6	1403.0	1390.1	1378.2	1368.5	1357.8
37.5°	1403.0	1401.9	1395.4	1384.7	1367.5	1348.1	1325.6	1297.6	1269.6	1239.5	1210.5
40°	1338.5	1335.2	1329.9	1314.8	1295.4	1271.8	1241.7	1207.3	1162.1	1115.9	1068.6
42.5°	1228.8	1229.9	1223.4	1211.6	1193.3	1170.7	1139.6	1101.9	1053.6	998.7	937.5
45°	1100.9	1100.9	1098.7	1089.0	1076.1	1057.9	1034.2	1003.0	955.7	899.8	834.2
47.5°	967.6	968.6	965.4	963.3	957.9	946.1	928.9	905.2	871.9	818.1	752.5
50°	832.1	832.1	837.5	836.4	836.4	832.1	824.6	810.6	781.6	738.6	677.3
52.5°	696.6	698.8	702.0	706.3	711.7	720.3	711.7	705.2	687.0	653.6	601.0
55°	556.9	559.0	564.4	571.9	578.4	587.0	589.1	589.1	579.4	556.9	517.1
57.5°	437.6	434.3	438.6	445.1	453.7	462.3	468.7	476.3	475.2	460.1	427.9
60°	329.0	330.0	333.3	339.7	346.2	353.7	362.3	368.7	372.0	364.5	344.0
62.5°	239.7	239.7	244.0	250.5	253.7	264.5	269.8	273.1	276.3	275.2	262.3
65°	167.7	169.9	172.0	175.2	178.5	184.9	188.1	194.6	196.7	197.8	188.1
67.5°	118.3	115.0	117.2	119.3	122.6	126.9	133.3	133.3	136.5	136.5	130.1
70°	75.3	75.3	76.3	79.5	81.7	82.8	84.9	87.1	90.3	89.2	89.2
72.5°	50.5	49.5	50.5	51.6	52.7	55.9	55.9	57.0	59.1	60.2	55.9
75°	25.8	26.9	29.0	28.0	31.2	29.0	30.1	33.3	32.3	30.1	30.1
77.5°	21.5	21.5	21.5	20.4	22.6	22.6	21.5	23.6	22.6	22.6	21.5
80°	15.0	16.1	15.0	14.0	15.0	14.0	14.0	14.0	14.0	14.0	12.9
82.5°	11.8	9.7	10.8	9.7	10.8	10.8	9.7	8.6	8.6	9.7	8.6
85°	8.6	6.4	7.5	7.5	6.4	6.4	6.4	6.4	6.4	5.4	5.4
87.5°	5.4	3.2	3.2	3.2	4.3	4.3	4.3	3.2	4.3	4.3	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°	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8
2.5°	2006.1	2005.0	2007.2	2006.1	2006.1	2005.0	2006.1	2005.0	2007.2	2002.8	2003.9
5°	2006.1	2003.9	2005.0	2006.1	2007.2	2005.0	2005.0	2005.0	2007.2	2005.0	2006.1
7.5°	2001.8	2000.7	2003.9	2006.1	2005.0	2003.9	2006.1	2005.0	2007.2	2006.1	2008.2
10°	1993.2	1994.2	1996.4	1999.6	2000.7	2001.8	2003.9	2003.9	2007.2	2002.8	2005.0
12.5°	1980.3	1984.6	1990.0	1992.1	1996.4	1996.4	1998.6	1999.6	2001.8	2000.7	2003.9
15°	1964.1	1969.5	1976.0	1981.4	1986.7	1990.0	1993.2	1994.2	1997.5	1994.2	1995.3
17.5°	1944.8	1951.2	1960.9	1967.4	1976.0	1979.2	1983.5	1985.6	1988.9	1986.7	1987.8
20°	1917.9	1925.5	1936.2	1945.9	1951.2	1958.8	1964.1	1967.4	1969.5	1967.4	1968.4
22.5°	1880.3	1891.0	1905.0	1912.5	1923.3	1929.7	1930.8	1938.3	1943.7	1938.3	1940.5
25°	1836.2	1847.0	1857.7	1873.8	1883.5	1891.0	1898.6	1899.6	1905.0	1903.9	1902.9
27.5°	1763.1	1777.1	1795.3	1808.3	1821.2	1833.0	1841.6	1843.7	1849.1	1847.0	1848.0
30°	1663.1	1678.2	1695.4	1715.8	1734.1	1745.9	1756.7	1764.2	1769.5	1766.3	1765.3
32.5°	1521.2	1536.3	1554.6	1575.0	1596.5	1613.7	1626.6	1636.3	1642.7	1640.5	1635.2
35°	1358.9	1363.2	1375.0	1391.1	1409.4	1427.7	1439.5	1450.3	1457.8	1459.9	1459.9
37.5°	1192.3	1178.3	1169.7	1169.7	1180.4	1187.9	1198.7	1205.1	1217.0	1221.3	1224.5
40°	1031.0	998.7	968.6	946.1	931.0	929.9	929.9	933.1	943.9	957.9	970.8
42.5°	886.9	835.3	789.1	747.2	717.1	699.9	692.3	693.4	702.0	714.9	736.4
45°	771.9	707.4	649.3	598.8	558.0	531.1	518.2	517.1	523.6	538.6	562.3
47.5°	682.7	613.9	548.3	490.2	446.2	417.1	402.1	397.8	402.1	416.0	444.0
50°	608.5	537.5	469.8	409.6	362.3	332.2	318.2	312.8	318.2	330.0	358.0
52.5°	539.7	466.6	403.2	345.1	294.6	268.8	253.7	250.5	253.7	267.7	290.3
55°	460.1	397.8	335.4	277.4	233.3	207.5	195.7	192.4	195.7	208.6	232.2
57.5°	381.7	327.9	273.1	220.4	182.8	160.2	149.4	145.1	152.6	161.3	189.2
60°	308.5	265.5	219.3	173.1	141.9	121.5	112.9	111.8	114.0	124.7	144.0
62.5°	241.9	206.4	169.9	132.2	106.4	97.8	87.1	86.0	88.1	94.6	109.7
65°	174.2	151.6	123.6	96.8	76.3	64.5	60.2	61.3	63.4	67.7	81.7
67.5°	121.5	105.4	86.0	67.7	52.7	47.3	43.0	41.9	43.0	50.5	58.1
70°	81.7	72.0	58.1	51.6	36.6	29.0	30.1	26.9	31.2	31.2	37.6
72.5°	53.7	47.3	38.7	30.1	25.8	20.4	20.4	19.4	21.5	22.6	28.0
75°	28.0	21.5	21.5	15.0	10.8	5.4	9.7	8.6	7.5	8.6	10.8
77.5°	19.4	16.1	15.0	11.8	10.8	8.6	8.6	8.6	8.6	9.7	10.8
80°	11.8	11.8	8.6	7.5	6.4	5.4	6.4	6.4	6.4	6.4	7.5
82.5°	7.5	6.4	6.4	5.4	5.4	4.3	4.3	4.3	4.3	4.3	6.4
85°	6.4	4.3	4.3	3.2	4.3	7.5	3.2	4.3	4.3	4.3	3.2
87.5°	2.2	3.2	3.2	3.2	2.2	1.1	2.2	3.2	3.2	5.4	4.3
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°	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8	2002.8
2.5°	2006.1	2007.2	2007.2	2006.1	2006.1	2003.9	2008.2	2005.0	2006.1	2010.4	2007.2
5°	2008.2	2009.3	2009.3	2008.2	2008.2	2008.2	2009.3	2009.3	2008.2	2007.2	2009.3
7.5°	2012.5	2011.4	2011.4	2009.3	2009.3	2007.2	2009.3	2006.1	2008.2	2006.1	2009.3
10°	2007.2	2008.2	2007.2	2006.1	2006.1	2005.0	2005.0	2001.8	2002.8	1999.6	2001.8
12.5°	2003.9	2002.8	2002.8	2000.7	1998.6	1996.4	1995.3	1992.1	1992.1	1984.6	1987.8
15°	1995.3	1996.4	1993.2	1988.9	1986.7	1981.4	1979.2	1974.9	1970.6	1965.2	1966.3
17.5°	1987.8	1984.6	1980.3	1976.0	1967.4	1963.1	1958.8	1952.3	1950.2	1943.7	1941.6
20°	1965.2	1963.1	1957.7	1950.2	1944.8	1935.1	1930.8	1924.4	1919.0	1912.5	1909.3
22.5°	1936.2	1934.0	1927.6	1920.1	1911.5	1907.2	1902.9	1891.0	1885.7	1879.2	1878.1
25°	1899.6	1896.4	1890.0	1881.4	1877.1	1865.2	1860.9	1852.3	1850.2	1843.7	1842.7
27.5°	1843.7	1839.4	1831.9	1821.2	1813.6	1806.1	1801.8	1795.3	1793.2	1786.7	1785.7
30°	1759.9	1754.5	1739.5	1735.2	1722.2	1714.7	1714.7	1706.1	1707.2	1702.9	1702.9
32.5°	1627.7	1619.1	1607.2	1598.6	1590.0	1585.7	1585.7	1582.5	1584.6	1584.6	1586.8
35°	1452.4	1440.6	1434.1	1428.8	1428.8	1433.0	1446.0	1449.2	1455.6	1461.0	1465.3
37.5°	1227.7	1226.7	1234.2	1240.6	1256.8	1275.0	1297.6	1317.0	1335.2	1348.1	1361.0
40°	984.8	1011.6	1033.1	1063.3	1088.0	1123.4	1164.3	1197.6	1228.8	1251.4	1275.0
42.5°	768.7	803.1	848.2	892.3	936.4	984.8	1038.5	1084.7	1125.6	1156.8	1181.5
45°	598.8	646.1	701.0	756.9	813.8	874.0	929.9	977.2	1020.2	1052.5	1077.2
47.5°	482.7	534.3	596.7	657.9	722.4	785.9	848.2	889.1	924.5	950.4	972.9
50°	398.8	453.7	519.3	589.1	653.6	717.1	770.8	810.6	839.6	862.2	876.2
52.5°	333.3	391.3	461.2	531.1	595.6	653.6	702.0	732.1	755.8	771.9	784.8
55°	275.2	331.1	396.7	462.3	525.7	580.5	620.3	642.9	661.2	670.8	678.4
57.5°	224.7	276.3	336.5	396.7	451.5	496.7	527.9	550.4	559.0	566.6	565.5
60°	176.3	224.7	279.5	331.1	378.4	415.0	437.6	450.4	456.9	460.1	458.0
62.5°	138.7	182.8	224.7	269.8	304.2	335.4	356.9	356.9	360.1	361.2	364.5
65°	103.2	136.5	173.1	206.4	234.4	254.8	266.6	269.8	274.2	273.1	270.9
67.5°	76.3	101.1	127.9	152.6	172.0	184.9	193.5	201.0	200.0	197.8	196.7
70°	52.7	68.8	92.5	107.5	121.5	134.4	136.5	137.6	138.7	139.8	137.6
72.5°	36.6	48.4	61.3	74.2	82.8	88.1	93.5	94.6	94.6	94.6	93.5
75°	18.3	24.7	36.6	41.9	49.5	51.6	55.9	55.9	59.1	54.8	53.7
77.5°	16.1	19.4	25.8	30.1	33.3	36.6	37.6	40.9	39.8	37.6	38.7
80°	9.7	11.8	16.1	18.3	22.6	23.6	24.7	25.8	24.7	25.8	25.8
82.5°	7.5	8.6	10.8	10.8	14.0	14.0	15.0	15.0	16.1	16.1	16.1
85°	4.3	7.5	6.4	12.9	8.6	8.6	10.8	12.9	10.8	10.8	12.9
87.5°	4.3	4.3	3.2	4.3	4.3	4.3	5.4	6.4	6.4	7.5	6.4
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: P246112

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2002.8	2002.8	2002.8	2002.8
2.5°	2006.1	2008.2	2005.0	2003.9
5°	2009.3	2009.3	2007.2	2007.2
7.5°	2009.3	2009.3	2006.1	2003.9
10°	2000.7	2000.7	1997.5	1995.3
12.5°	1984.6	1984.6	1983.5	1980.3
15°	1964.1	1964.1	1959.8	1956.6
17.5°	1936.2	1938.3	1933.0	1933.0
20°	1906.1	1905.0	1900.7	1898.6
22.5°	1874.9	1872.8	1871.7	1865.2
25°	1841.6	1839.4	1836.2	1833.0
27.5°	1784.6	1783.5	1780.3	1776.0
30°	1697.5	1696.4	1692.2	1692.2
32.5°	1584.6	1583.6	1579.3	1580.4
35°	1467.5	1471.8	1469.6	1465.3
37.5°	1369.6	1372.9	1375.0	1372.9
40°	1287.9	1297.6	1298.7	1300.8
42.5°	1200.9	1213.7	1218.1	1220.2
45°	1096.6	1108.4	1118.1	1115.9
47.5°	990.1	998.7	1007.3	1000.9
50°	888.0	893.4	896.6	896.6
52.5°	791.3	791.3	790.2	791.3
55°	680.5	680.5	676.2	678.4
57.5°	564.4	566.6	563.3	558.0
60°	456.9	451.5	449.4	446.2
62.5°	355.9	355.9	348.3	358.0
65°	266.6	263.4	260.2	259.1
67.5°	193.5	192.4	189.2	188.1
70°	136.5	132.2	131.2	129.0
72.5°	91.4	91.4	89.2	89.2
75°	55.9	50.5	49.5	50.5
77.5°	38.7	37.6	37.6	36.6
80°	25.8	24.7	26.9	23.6
82.5°	16.1	17.2	16.1	17.2
85°	10.8	12.9	11.8	11.8
87.5°	6.4	6.4	6.4	6.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)