

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: P244636

Luminaire Tested: **LSR8B40D010 EC8B40935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244636
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 EC8B40935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3804.0 lumens
Efficiency: N/A
Efficacy: 93.0 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

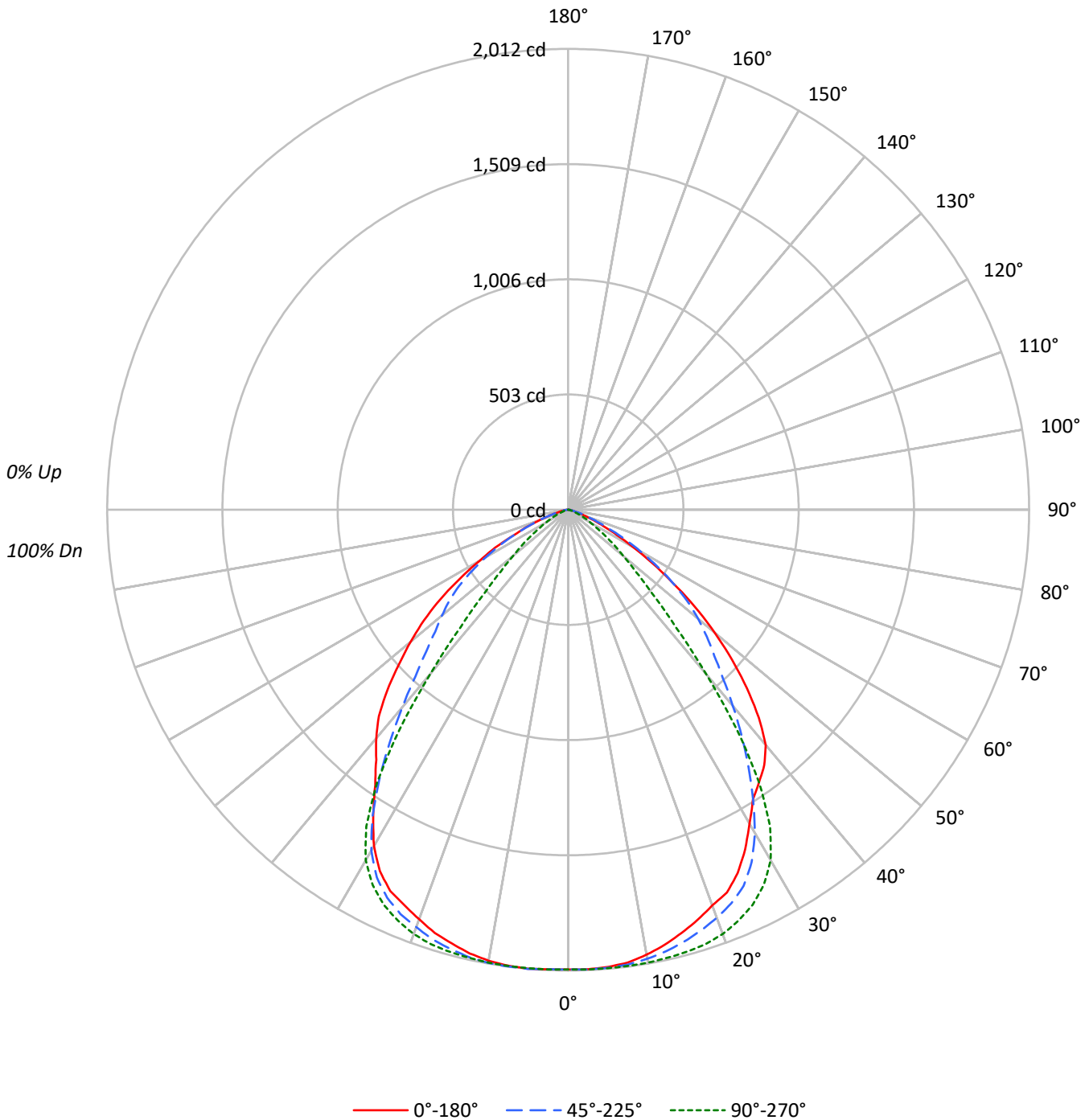
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	61892	61892	61892
5°	62026	62193	62261
10°	61766	62878	62608
15°	61080	63797	62594
20°	60347	64695	62434
25°	59566	64772	62499
30°	56351	62949	60378
35°	54671	54708	55277
40°	53993	37641	52475
45°	48110	22598	48768
50°	40005	15039	43104
55°	30004	10371	36547
60°	20333	6907	27574
65°	12265	4480	18942
70°	6798	2425	11658
75°	3086	1025	6029
80°	2681	1154	4209
85°	3043	1521	4210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.5	5.0
10°-20°	556.3	14.6
20°-30°	844.3	22.2
30°-40°	886.8	23.3
40°-50°	664.9	17.5
50°-60°	426.6	11.2
60°-70°	182.5	4.8
70°-80°	43.1	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°	1592.1	41.9
0°-40°	2478.9	65.2
0°-60°	3570.4	93.9
0°-90°	3804.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3804.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2007	2007	2007	2007	2007	
5°	2004	2007	2009	2012	2011	190
15°	1913	1953	1998	1986	1961	540
25°	1751	1812	1904	1869	1837	800
35°	1452	1371	1453	1436	1468	911
45°	1103	902	518	876	1118	845
55°	558	558	193	582	680	506
65°	168	198	61	255	260	179
75°	26	30	9	52	51	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°	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1
2.5°	2008.1	2010.3	2009.2	2009.2	2008.1	2009.2	2009.2	2011.4	2011.4	2009.2	2008.1
5°	2003.8	2006.0	2006.0	2003.8	2003.8	2009.2	2006.0	2008.1	2008.1	2007.1	2007.1
7.5°	1994.1	1994.1	1998.4	1995.2	1995.2	1998.4	1997.4	1999.5	2001.7	2002.8	2002.8
10°	1972.6	1974.7	1975.8	1975.8	1976.9	1980.1	1982.3	1986.6	1988.7	1990.9	1992.0
12.5°	1945.7	1948.9	1950.0	1948.9	1952.1	1956.4	1961.8	1967.2	1970.4	1974.7	1978.0
15°	1913.3	1913.3	1915.5	1918.7	1920.9	1927.4	1932.7	1939.2	1947.8	1953.2	1958.6
17.5°	1877.8	1880.0	1883.2	1883.2	1887.5	1898.2	1901.5	1911.2	1920.9	1926.3	1937.1
20°	1839.0	1841.2	1844.4	1846.6	1851.9	1860.6	1867.0	1875.6	1886.4	1896.1	1906.9
22.5°	1808.8	1804.5	1806.7	1808.8	1814.2	1821.8	1829.3	1840.1	1850.9	1860.6	1871.3
25°	1750.7	1751.7	1755.0	1757.1	1763.6	1770.1	1778.7	1791.6	1801.3	1812.1	1823.9
27.5°	1672.0	1673.1	1678.5	1678.5	1683.9	1694.6	1700.0	1710.8	1723.7	1734.5	1748.5
30°	1582.6	1584.7	1584.7	1589.1	1592.3	1597.7	1603.1	1613.8	1620.3	1630.0	1649.4
32.5°	1500.7	1502.9	1501.8	1500.7	1497.5	1496.4	1495.3	1497.5	1499.7	1502.9	1510.4
35°	1452.3	1446.9	1442.6	1435.0	1426.4	1415.6	1405.9	1393.0	1381.1	1371.4	1360.7
37.5°	1405.9	1404.8	1398.4	1387.6	1370.4	1351.0	1328.4	1300.3	1272.3	1242.2	1213.1
40°	1341.3	1338.0	1332.7	1317.6	1298.2	1274.5	1244.3	1209.8	1164.6	1118.3	1070.9
42.5°	1231.4	1232.5	1226.0	1214.1	1195.8	1173.2	1142.0	1104.3	1055.8	1000.8	939.4
45°	1103.2	1103.2	1101.0	1091.3	1078.4	1060.1	1036.4	1005.2	957.8	901.7	836.0
47.5°	969.6	970.7	967.4	965.3	959.9	948.1	930.8	907.1	873.7	819.8	754.1
50°	833.9	833.9	839.2	838.2	838.2	833.9	826.3	812.3	783.2	740.1	678.7
52.5°	698.1	700.3	703.5	707.8	713.2	721.8	713.2	706.7	688.4	655.0	602.2
55°	558.1	560.2	565.6	573.1	579.6	588.2	590.4	590.4	580.7	558.1	518.2
57.5°	438.5	435.2	439.6	446.0	454.6	463.3	469.7	477.3	476.2	461.1	428.8
60°	329.7	330.7	334.0	340.4	346.9	354.4	363.1	369.5	372.8	365.2	344.7
62.5°	240.2	240.2	244.5	251.0	254.2	265.0	270.4	273.6	276.9	275.8	262.9
65°	168.1	170.2	172.4	175.6	178.8	185.3	188.5	195.0	197.2	198.2	188.5
67.5°	118.5	115.3	117.4	119.6	122.8	127.1	133.6	133.6	136.8	136.8	130.4
70°	75.4	75.4	76.5	79.7	81.9	83.0	85.1	87.3	90.5	89.4	89.4
72.5°	50.6	49.6	50.6	51.7	52.8	56.0	56.0	57.1	59.3	60.3	56.0
75°	25.9	26.9	29.1	28.0	31.2	29.1	30.2	33.4	32.3	30.2	30.2
77.5°	21.5	21.5	21.5	20.5	22.6	22.6	21.5	23.7	22.6	22.6	21.5
80°	15.1	16.2	15.1	14.0	15.1	14.0	14.0	14.0	14.0	14.0	12.9
82.5°	11.9	9.7	10.8	9.7	10.8	10.8	9.7	8.6	8.6	9.7	8.6
85°	8.6	6.5	7.5	7.5	6.5	6.5	6.5	6.5	6.5	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°	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1
2.5°	2010.3	2009.2	2011.4	2010.3	2010.3	2009.2	2010.3	2009.2	2011.4	2007.1	2008.1
5°	2010.3	2008.1	2009.2	2010.3	2011.4	2009.2	2009.2	2009.2	2011.4	2009.2	2010.3
7.5°	2006.0	2004.9	2008.1	2010.3	2009.2	2008.1	2010.3	2009.2	2011.4	2010.3	2012.4
10°	1997.4	1998.4	2000.6	2003.8	2004.9	2006.0	2008.1	2008.1	2011.4	2007.1	2009.2
12.5°	1984.4	1988.7	1994.1	1996.3	2000.6	2000.6	2002.8	2003.8	2006.0	2004.9	2008.1
15°	1968.3	1973.7	1980.1	1985.5	1990.9	1994.1	1997.4	1998.4	2001.7	1998.4	1999.5
17.5°	1948.9	1955.3	1965.0	1971.5	1980.1	1983.4	1987.7	1989.8	1993.1	1990.9	1992.0
20°	1921.9	1929.5	1940.3	1950.0	1955.3	1962.9	1968.3	1971.5	1973.7	1971.5	1972.6
22.5°	1884.3	1895.0	1909.0	1916.6	1927.4	1933.8	1934.9	1942.4	1947.8	1942.4	1944.6
25°	1840.1	1850.9	1861.6	1877.8	1887.5	1895.0	1902.6	1903.7	1909.0	1907.9	1906.9
27.5°	1766.8	1780.8	1799.1	1812.1	1825.0	1836.9	1845.5	1847.6	1853.0	1850.9	1851.9
30°	1666.6	1681.7	1699.0	1719.4	1737.7	1749.6	1760.4	1767.9	1773.3	1770.1	1769.0
32.5°	1524.4	1539.5	1557.8	1578.3	1599.8	1617.1	1630.0	1639.7	1646.2	1644.0	1638.6
35°	1361.8	1366.1	1377.9	1394.1	1412.4	1430.7	1442.6	1453.3	1460.8	1463.0	1463.0
37.5°	1194.8	1180.8	1172.1	1172.1	1182.9	1190.4	1201.2	1207.7	1219.5	1223.8	1227.1
40°	1033.1	1000.8	970.7	948.1	933.0	931.9	931.9	935.1	945.9	959.9	972.8
42.5°	888.8	837.1	790.8	748.7	718.6	701.3	693.8	694.9	703.5	716.4	738.0
45°	773.5	708.9	650.7	600.1	559.1	532.2	519.3	518.2	524.7	539.7	563.5
47.5°	684.1	615.1	549.4	491.3	447.1	418.0	402.9	398.6	402.9	416.9	444.9
50°	609.8	538.7	470.8	410.5	363.1	332.9	318.9	313.5	318.9	330.7	358.7
52.5°	540.8	467.6	404.0	345.8	295.2	269.3	254.2	251.0	254.2	268.2	290.9
55°	461.1	398.6	336.1	277.9	233.8	207.9	196.1	192.9	196.1	209.0	232.7
57.5°	382.5	328.6	273.6	220.8	183.2	160.5	149.8	145.4	153.0	161.6	189.6
60°	309.2	266.1	219.8	173.5	142.2	121.7	113.1	112.0	114.2	125.0	144.4
62.5°	242.4	206.9	170.2	132.5	106.7	98.0	87.3	86.2	88.3	94.8	109.9
65°	174.5	151.9	123.9	97.0	76.5	64.6	60.3	61.4	63.6	67.9	81.9
67.5°	121.7	105.6	86.2	67.9	52.8	47.4	43.1	42.0	43.1	50.6	58.2
70°	81.9	72.2	58.2	51.7	36.6	29.1	30.2	26.9	31.2	31.2	37.7
72.5°	53.9	47.4	38.8	30.2	25.9	20.5	20.5	19.4	21.5	22.6	28.0
75°	28.0	21.5	21.5	15.1	10.8	5.4	9.7	8.6	7.5	8.6	10.8
77.5°	19.4	16.2	15.1	11.9	10.8	8.6	8.6	8.6	8.6	9.7	10.8
80°	11.9	11.9	8.6	7.5	6.5	5.4	6.5	6.5	6.5	6.5	7.5
82.5°	7.5	6.5	6.5	5.4	5.4	4.3	4.3	4.3	4.3	4.3	6.5
85°	6.5	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°	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1	2007.1
2.5°	2010.3	2011.4	2011.4	2010.3	2010.3	2008.1	2012.4	2009.2	2010.3	2014.6	2011.4
5°	2012.4	2013.5	2013.5	2012.4	2012.4	2012.4	2013.5	2013.5	2012.4	2011.4	2013.5
7.5°	2016.8	2015.7	2015.7	2013.5	2013.5	2011.4	2013.5	2010.3	2012.4	2010.3	2013.5
10°	2011.4	2012.4	2011.4	2010.3	2010.3	2009.2	2009.2	2006.0	2007.1	2003.8	2006.0
12.5°	2008.1	2007.1	2007.1	2004.9	2002.8	2000.6	1999.5	1996.3	1996.3	1988.7	1992.0
15°	1999.5	2000.6	1997.4	1993.1	1990.9	1985.5	1983.4	1979.0	1974.7	1969.4	1970.4
17.5°	1992.0	1988.7	1984.4	1980.1	1971.5	1967.2	1962.9	1956.4	1954.3	1947.8	1945.7
20°	1969.4	1967.2	1961.8	1954.3	1948.9	1939.2	1934.9	1928.4	1923.0	1916.6	1913.3
22.5°	1940.3	1938.1	1931.6	1924.1	1915.5	1911.2	1906.9	1895.0	1889.6	1883.2	1882.1
25°	1903.7	1900.4	1894.0	1885.3	1881.0	1869.2	1864.9	1856.2	1854.1	1847.6	1846.6
27.5°	1847.6	1843.3	1835.8	1825.0	1817.5	1809.9	1805.6	1799.1	1797.0	1790.5	1789.5
30°	1763.6	1758.2	1743.1	1738.8	1725.9	1718.3	1718.3	1709.7	1710.8	1706.5	1706.5
32.5°	1631.1	1622.5	1610.6	1602.0	1593.4	1589.1	1589.1	1585.8	1588.0	1588.0	1590.1
35°	1455.5	1443.6	1437.2	1431.8	1431.8	1436.1	1449.0	1452.3	1458.7	1464.1	1468.4
37.5°	1230.3	1229.2	1236.8	1243.2	1259.4	1277.7	1300.3	1319.7	1338.0	1351.0	1363.9
40°	986.8	1013.8	1035.3	1065.5	1090.2	1125.8	1166.7	1200.1	1231.4	1254.0	1277.7
42.5°	770.3	804.8	850.0	894.2	938.4	986.8	1040.7	1087.0	1128.0	1159.2	1184.0
45°	600.1	647.5	702.4	758.4	815.5	875.9	931.9	979.3	1022.4	1054.7	1079.5
47.5°	483.7	535.4	597.9	659.3	724.0	787.5	850.0	891.0	926.5	952.4	975.0
50°	399.7	454.6	520.4	590.4	655.0	718.6	772.4	812.3	841.4	864.0	878.0
52.5°	334.0	392.1	462.2	532.2	596.8	655.0	703.5	733.7	757.4	773.5	786.4
55°	275.8	331.8	397.5	463.3	526.8	581.8	621.6	644.3	662.5	672.2	679.8
57.5°	225.2	276.9	337.2	397.5	452.5	497.7	529.0	551.6	560.2	567.8	566.7
60°	176.7	225.2	280.1	331.8	379.2	415.8	438.5	451.4	457.9	461.1	458.9
62.5°	139.0	183.2	225.2	270.4	304.9	336.1	357.7	357.7	360.9	362.0	365.2
65°	103.4	136.8	173.5	206.9	234.8	255.3	267.2	270.4	274.7	273.6	271.5
67.5°	76.5	101.3	128.2	153.0	172.4	185.3	193.9	201.5	200.4	198.2	197.2
70°	52.8	69.0	92.7	107.7	121.7	134.7	136.8	137.9	139.0	140.1	137.9
72.5°	36.6	48.5	61.4	74.3	83.0	88.3	93.7	94.8	94.8	94.8	93.7
75°	18.3	24.8	36.6	42.0	49.6	51.7	56.0	56.0	59.3	54.9	53.9
77.5°	16.2	19.4	25.9	30.2	33.4	36.6	37.7	40.9	39.9	37.7	38.8
80°	9.7	11.9	16.2	18.3	22.6	23.7	24.8	25.9	24.8	25.9	25.9
82.5°	7.5	8.6	10.8	10.8	14.0	14.0	15.1	15.1	16.2	16.2	16.2
85°	4.3	7.5	6.5	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	6.5	6.5	7.5	6.5
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: P244636

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2007.1	2007.1	2007.1	2007.1
2.5°	2010.3	2012.4	2009.2	2008.1
5°	2013.5	2013.5	2011.4	2011.4
7.5°	2013.5	2013.5	2010.3	2008.1
10°	2004.9	2004.9	2001.7	1999.5
12.5°	1988.7	1988.7	1987.7	1984.4
15°	1968.3	1968.3	1964.0	1960.7
17.5°	1940.3	1942.4	1937.1	1937.1
20°	1910.1	1909.0	1904.7	1902.6
22.5°	1878.9	1876.7	1875.6	1869.2
25°	1845.5	1843.3	1840.1	1836.9
27.5°	1788.4	1787.3	1784.1	1779.8
30°	1701.1	1700.0	1695.7	1695.7
32.5°	1588.0	1586.9	1582.6	1583.7
35°	1470.5	1474.9	1472.7	1468.4
37.5°	1372.5	1375.8	1377.9	1375.8
40°	1290.6	1300.3	1301.4	1303.6
42.5°	1203.4	1216.3	1220.6	1222.8
45°	1098.9	1110.7	1120.4	1118.3
47.5°	992.2	1000.8	1009.5	1003.0
50°	889.9	895.3	898.5	898.5
52.5°	792.9	792.9	791.8	792.9
55°	681.9	681.9	677.6	679.8
57.5°	565.6	567.8	564.5	559.1
60°	457.9	452.5	450.3	447.1
62.5°	356.6	356.6	349.1	358.7
65°	267.2	263.9	260.7	259.6
67.5°	193.9	192.9	189.6	188.5
70°	136.8	132.5	131.4	129.3
72.5°	91.6	91.6	89.4	89.4
75°	56.0	50.6	49.6	50.6
77.5°	38.8	37.7	37.7	36.6
80°	25.9	24.8	26.9	23.7
82.5°	16.2	17.2	16.2	17.2
85°	10.8	12.9	11.9	11.9
87.5°	6.5	6.5	6.5	6.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)