

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: P244642

Luminaire Tested: **LSR8B40D010 EC8B40940 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244642
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 EC8B40940 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3973.0 lumens
Efficiency: N/A
Efficacy: 97.1 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

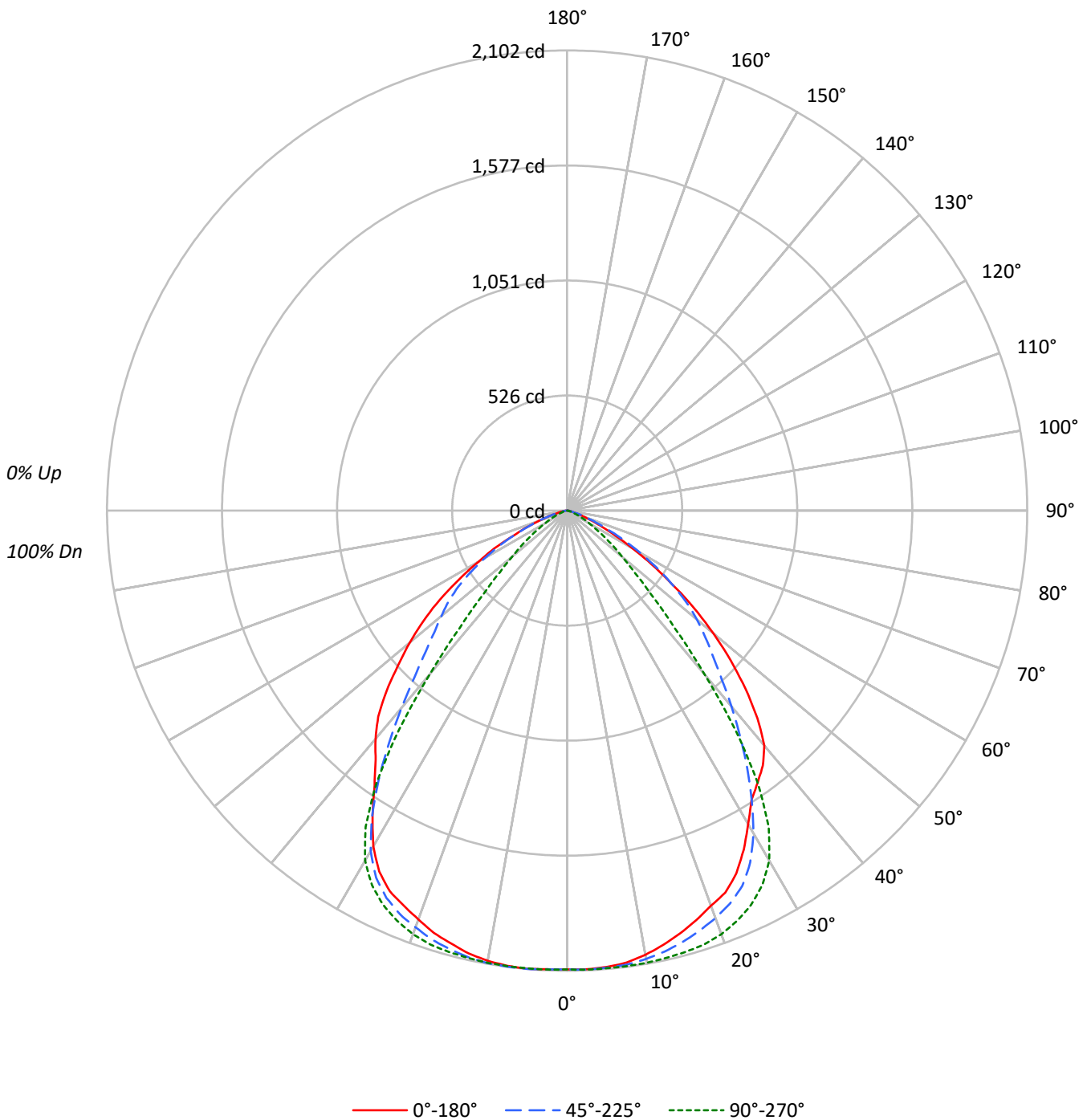
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	64639	64639	64639
5°	64781	64957	65025
10°	64509	65674	65392
15°	63794	66632	65377
20°	63028	67570	65207
25°	62210	67647	65275
30°	58854	65744	63063
35°	57099	57140	57735
40°	56392	39316	54806
45°	50246	23601	50931
50°	41780	15706	45018
55°	31332	10828	38171
60°	21234	7216	28801
65°	12805	4677	19788
70°	7105	2533	12172
75°	3217	1072	6303
80°	2788	1190	4404
85°	3184	1592	4387



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.1	5.0
10°-20°	581.0	14.6
20°-30°	881.8	22.2
30°-40°	926.2	23.3
40°-50°	694.4	17.5
50°-60°	445.5	11.2
60°-70°	190.6	4.8
70°-80°	45.0	1.1
80°-90°	8.4	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°	1662.9	41.9
0°-40°	2589.1	65.2
0°-60°	3729.0	93.9
0°-90°	3973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3973.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2096	2096	2096	2096	2096	
5°	2093	2096	2098	2102	2101	199
15°	1998	2040	2087	2074	2048	564
25°	1828	1893	1988	1952	1918	835
35°	1517	1432	1518	1500	1534	952
45°	1152	942	541	915	1168	882
55°	583	583	201	608	710	529
65°	176	207	64	267	271	187
75°	27	32	9	54	53	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°	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2
2.5°	2097.4	2099.6	2098.5	2098.5	2097.4	2098.5	2098.5	2100.7	2100.7	2098.5	2097.4
5°	2092.8	2095.1	2095.1	2092.8	2092.8	2098.5	2095.1	2097.4	2097.4	2096.2	2096.2
7.5°	2082.7	2082.7	2087.2	2083.9	2083.9	2087.2	2086.1	2088.4	2090.6	2091.7	2091.7
10°	2060.2	2062.5	2063.6	2063.6	2064.7	2068.1	2070.4	2074.9	2077.1	2079.4	2080.5
12.5°	2032.1	2035.5	2036.6	2035.5	2038.9	2043.3	2049.0	2054.6	2058.0	2062.5	2065.9
15°	1998.3	1998.3	2000.6	2004.0	2006.2	2013.0	2018.6	2025.3	2034.3	2040.0	2045.6
17.5°	1961.2	1963.5	1966.8	1966.8	1971.3	1982.6	1986.0	1996.1	2006.2	2011.8	2023.1
20°	1920.7	1922.9	1926.3	1928.6	1934.2	1943.2	1950.0	1959.0	1970.2	1980.4	1991.6
22.5°	1889.2	1884.7	1886.9	1889.2	1894.8	1902.7	1910.6	1921.8	1933.1	1943.2	1954.5
25°	1828.4	1829.6	1832.9	1835.2	1842.0	1848.7	1857.7	1871.2	1881.3	1892.6	1904.9
27.5°	1746.3	1747.4	1753.1	1753.1	1758.7	1769.9	1775.5	1786.8	1800.3	1811.6	1826.2
30°	1652.9	1655.1	1655.1	1659.7	1663.0	1668.7	1674.3	1685.5	1692.3	1702.4	1722.7
32.5°	1567.4	1569.6	1568.5	1567.4	1564.0	1562.9	1561.8	1564.0	1566.3	1569.6	1577.5
35°	1516.8	1511.1	1506.6	1498.8	1489.8	1478.5	1468.4	1454.9	1442.5	1432.4	1421.1
37.5°	1468.4	1467.2	1460.5	1449.2	1431.2	1411.0	1387.4	1358.1	1328.8	1297.3	1267.0
40°	1400.9	1397.5	1391.9	1376.1	1355.9	1331.1	1299.6	1263.6	1216.3	1167.9	1118.4
42.5°	1286.1	1287.2	1280.5	1268.1	1249.0	1225.3	1192.7	1153.3	1102.7	1045.3	981.2
45°	1152.2	1152.2	1149.9	1139.8	1126.3	1107.2	1082.4	1049.8	1000.3	941.8	873.1
47.5°	1012.7	1013.8	1010.4	1008.2	1002.5	990.2	972.2	947.4	912.5	856.3	787.6
50°	870.9	870.9	876.5	875.4	875.4	870.9	863.0	848.4	818.0	773.0	708.9
52.5°	729.1	731.4	734.8	739.3	744.9	753.9	744.9	738.1	719.0	684.1	629.0
55°	582.8	585.1	590.7	598.6	605.4	614.4	616.6	616.6	606.5	582.8	541.2
57.5°	458.0	454.6	459.1	465.8	474.8	483.8	490.6	498.5	497.3	481.6	447.8
60°	344.3	345.4	348.8	355.6	362.3	370.2	379.2	385.9	389.3	381.5	360.1
62.5°	250.9	250.9	255.4	262.2	265.5	276.8	282.4	285.8	289.2	288.0	274.5
65°	175.5	177.8	180.0	183.4	186.8	193.5	196.9	203.7	205.9	207.0	196.9
67.5°	123.8	120.4	122.7	124.9	128.3	132.8	139.5	139.5	142.9	142.9	136.1
70°	78.8	78.8	79.9	83.3	85.5	86.6	88.9	91.1	94.5	93.4	93.4
72.5°	52.9	51.8	52.9	54.0	55.1	58.5	58.5	59.6	61.9	63.0	58.5
75°	27.0	28.1	30.4	29.3	32.6	30.4	31.5	34.9	33.8	31.5	31.5
77.5°	22.5	22.5	22.5	21.4	23.6	23.6	22.5	24.8	23.6	23.6	22.5
80°	15.7	16.9	15.7	14.6	15.7	14.6	14.6	14.6	14.6	14.6	13.5
82.5°	12.4	10.1	11.3	10.1	11.3	11.3	10.1	9.0	9.0	10.1	9.0
85°	9.0	6.7	7.9	7.9	6.7	6.7	6.7	6.7	6.7	5.6	5.6
87.5°	5.6	3.4	3.4	3.4	4.5	4.5	4.5	3.4	4.5	4.5	2.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2
2.5°	2099.6	2098.5	2100.7	2099.6	2099.6	2098.5	2099.6	2098.5	2100.7	2096.2	2097.4
5°	2099.6	2097.4	2098.5	2099.6	2100.7	2098.5	2098.5	2098.5	2100.7	2098.5	2099.6
7.5°	2095.1	2094.0	2097.4	2099.6	2098.5	2097.4	2099.6	2098.5	2100.7	2099.6	2101.8
10°	2086.1	2087.2	2089.5	2092.8	2094.0	2095.1	2097.4	2097.4	2100.7	2096.2	2098.5
12.5°	2072.6	2077.1	2082.7	2085.0	2089.5	2089.5	2091.7	2092.8	2095.1	2094.0	2097.4
15°	2055.7	2061.4	2068.1	2073.7	2079.4	2082.7	2086.1	2087.2	2090.6	2087.2	2088.4
17.5°	2035.5	2042.2	2052.3	2059.1	2068.1	2071.5	2076.0	2078.2	2081.6	2079.4	2080.5
20°	2007.3	2015.2	2026.5	2036.6	2042.2	2050.1	2055.7	2059.1	2061.4	2059.1	2060.2
22.5°	1968.0	1979.2	1993.8	2001.7	2013.0	2019.7	2020.9	2028.7	2034.3	2028.7	2031.0
25°	1921.8	1933.1	1944.3	1961.2	1971.3	1979.2	1987.1	1988.2	1993.8	1992.7	1991.6
27.5°	1845.3	1860.0	1879.1	1892.6	1906.1	1918.5	1927.5	1929.7	1935.3	1933.1	1934.2
30°	1740.7	1756.4	1774.4	1795.8	1814.9	1827.3	1838.6	1846.4	1852.1	1848.7	1847.6
32.5°	1592.2	1607.9	1627.0	1648.4	1670.9	1688.9	1702.4	1712.6	1719.3	1717.0	1711.4
35°	1422.3	1426.7	1439.1	1456.0	1475.1	1494.3	1506.6	1517.9	1525.8	1528.0	1528.0
37.5°	1247.8	1233.2	1224.2	1224.2	1235.5	1243.3	1254.6	1261.3	1273.7	1278.2	1281.6
40°	1079.0	1045.3	1013.8	990.2	974.4	973.3	973.3	976.7	987.9	1002.5	1016.1
42.5°	928.3	874.3	825.9	782.0	750.5	732.5	724.6	725.8	734.8	748.3	770.7
45°	807.9	740.4	679.6	626.7	584.0	555.8	542.3	541.2	548.0	563.7	588.5
47.5°	714.5	642.5	573.8	513.1	467.0	436.6	420.8	416.3	420.8	435.4	464.7
50°	636.9	562.6	491.7	428.7	379.2	347.7	333.1	327.4	333.1	345.4	374.7
52.5°	564.8	488.3	422.0	361.2	308.3	281.3	265.5	262.2	265.5	280.2	303.8
55°	481.6	416.3	351.1	290.3	244.2	217.2	204.8	201.4	204.8	218.3	243.0
57.5°	399.5	343.2	285.8	230.7	191.3	167.6	156.4	151.9	159.8	168.8	198.0
60°	322.9	277.9	229.5	181.2	148.5	127.1	118.1	117.0	119.3	130.5	150.8
62.5°	253.2	216.0	177.8	138.4	111.4	102.4	91.1	90.0	92.3	99.0	114.8
65°	182.3	158.7	129.4	101.3	79.9	67.5	63.0	64.1	66.4	70.9	85.5
67.5°	127.1	110.3	90.0	70.9	55.1	49.5	45.0	43.9	45.0	52.9	60.8
70°	85.5	75.4	60.8	54.0	38.3	30.4	31.5	28.1	32.6	32.6	39.4
72.5°	56.2	49.5	40.5	31.5	27.0	21.4	21.4	20.3	22.5	23.6	29.3
75°	29.3	22.5	22.5	15.7	11.3	5.6	10.1	9.0	7.9	9.0	11.3
77.5°	20.3	16.9	15.7	12.4	11.3	9.0	9.0	9.0	9.0	10.1	11.3
80°	12.4	12.4	9.0	7.9	6.7	5.6	6.7	6.7	6.7	6.7	7.9
82.5°	7.9	6.7	6.7	5.6	5.6	4.5	4.5	4.5	4.5	4.5	6.7
85°	6.7	4.5	4.5	3.4	4.5	7.9	3.4	4.5	4.5	4.5	3.4
87.5°	2.3	3.4	3.4	3.4	2.3	1.1	2.3	3.4	3.4	5.6	4.5
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°	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2	2096.2
2.5°	2099.6	2100.7	2100.7	2099.6	2099.6	2097.4	2101.8	2098.5	2099.6	2104.1	2100.7
5°	2101.8	2103.0	2103.0	2101.8	2101.8	2101.8	2103.0	2103.0	2101.8	2100.7	2103.0
7.5°	2106.4	2105.2	2105.2	2103.0	2103.0	2100.7	2103.0	2099.6	2101.8	2099.6	2103.0
10°	2100.7	2101.8	2100.7	2099.6	2099.6	2098.5	2098.5	2095.1	2096.2	2092.8	2095.1
12.5°	2097.4	2096.2	2096.2	2094.0	2091.7	2089.5	2088.4	2085.0	2085.0	2077.1	2080.5
15°	2088.4	2089.5	2086.1	2081.6	2079.4	2073.7	2071.5	2067.0	2062.5	2056.9	2058.0
17.5°	2080.5	2077.1	2072.6	2068.1	2059.1	2054.6	2050.1	2043.3	2041.1	2034.3	2032.1
20°	2056.9	2054.6	2049.0	2041.1	2035.5	2025.3	2020.9	2014.1	2008.5	2001.7	1998.3
22.5°	2026.5	2024.2	2017.5	2009.6	2000.6	1996.1	1991.6	1979.2	1973.6	1966.8	1965.7
25°	1988.2	1984.8	1978.1	1969.1	1964.6	1952.2	1947.7	1938.7	1936.5	1929.7	1928.6
27.5°	1929.7	1925.2	1917.3	1906.1	1898.2	1890.3	1885.8	1879.1	1876.8	1870.1	1869.0
30°	1842.0	1836.3	1820.6	1816.1	1802.6	1794.7	1794.7	1785.7	1786.8	1782.3	1782.3
32.5°	1703.5	1694.5	1682.2	1673.2	1664.2	1659.7	1659.7	1656.3	1658.5	1658.5	1660.8
35°	1520.1	1507.8	1501.0	1495.4	1495.4	1499.9	1513.4	1516.8	1523.5	1529.1	1533.7
37.5°	1285.0	1283.9	1291.7	1298.5	1315.4	1334.5	1358.1	1378.4	1397.5	1411.0	1424.5
40°	1030.7	1058.8	1081.3	1112.8	1138.7	1175.8	1218.6	1253.5	1286.1	1309.7	1334.5
42.5°	804.5	840.5	887.8	933.9	980.0	1030.7	1086.9	1135.3	1178.1	1210.7	1236.6
45°	626.7	676.2	733.6	792.1	851.8	914.8	973.3	1022.8	1067.8	1101.6	1127.4
47.5°	505.2	559.2	624.5	688.6	756.1	822.5	887.8	930.5	967.7	994.7	1018.3
50°	417.4	474.8	543.5	616.6	684.1	750.5	806.8	848.4	878.8	902.4	917.0
52.5°	348.8	409.6	482.7	555.8	623.3	684.1	734.8	766.3	791.0	807.9	821.4
55°	288.0	346.6	415.2	483.8	550.2	607.6	649.2	672.9	692.0	702.1	710.0
57.5°	235.2	289.2	352.2	415.2	472.6	519.9	552.5	576.1	585.1	593.0	591.8
60°	184.5	235.2	292.6	346.6	396.1	434.3	458.0	471.5	478.2	481.6	479.3
62.5°	145.1	191.3	235.2	282.4	318.4	351.1	373.6	373.6	376.9	378.1	381.5
65°	108.0	142.9	181.2	216.0	245.3	266.7	279.1	282.4	286.9	285.8	283.5
67.5°	79.9	105.8	133.9	159.8	180.0	193.5	202.5	210.4	209.3	207.0	205.9
70°	55.1	72.0	96.8	112.5	127.1	140.7	142.9	144.0	145.1	146.3	144.0
72.5°	38.3	50.6	64.1	77.6	86.6	92.3	97.9	99.0	99.0	99.0	97.9
75°	19.1	25.9	38.3	43.9	51.8	54.0	58.5	58.5	61.9	57.4	56.2
77.5°	16.9	20.3	27.0	31.5	34.9	38.3	39.4	42.8	41.6	39.4	40.5
80°	10.1	12.4	16.9	19.1	23.6	24.8	25.9	27.0	25.9	27.0	27.0
82.5°	7.9	9.0	11.3	11.3	14.6	14.6	15.7	15.7	16.9	16.9	16.9
85°	4.5	7.9	6.7	13.5	9.0	9.0	11.3	13.5	11.3	11.3	13.5
87.5°	4.5	4.5	3.4	4.5	4.5	4.5	5.6	6.7	6.7	7.9	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: P244642

CATALOG NUMBER: LSR8B40D010 EC8B40940 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2096.2	2096.2	2096.2	2096.2
2.5°	2099.6	2101.8	2098.5	2097.4
5°	2103.0	2103.0	2100.7	2100.7
7.5°	2103.0	2103.0	2099.6	2097.4
10°	2094.0	2094.0	2090.6	2088.4
12.5°	2077.1	2077.1	2076.0	2072.6
15°	2055.7	2055.7	2051.2	2047.9
17.5°	2026.5	2028.7	2023.1	2023.1
20°	1995.0	1993.8	1989.4	1987.1
22.5°	1962.3	1960.1	1959.0	1952.2
25°	1927.5	1925.2	1921.8	1918.5
27.5°	1867.8	1866.7	1863.3	1858.8
30°	1776.7	1775.5	1771.1	1771.1
32.5°	1658.5	1657.4	1652.9	1654.0
35°	1535.9	1540.4	1538.1	1533.7
37.5°	1433.5	1436.9	1439.1	1436.9
40°	1348.0	1358.1	1359.2	1361.5
42.5°	1256.8	1270.3	1274.9	1277.1
45°	1147.7	1160.1	1170.2	1167.9
47.5°	1036.3	1045.3	1054.3	1047.6
50°	929.4	935.0	938.4	938.4
52.5°	828.2	828.2	827.0	828.2
55°	712.2	712.2	707.8	710.0
57.5°	590.7	593.0	589.6	584.0
60°	478.2	472.6	470.3	467.0
62.5°	372.4	372.4	364.6	374.7
65°	279.1	275.7	272.3	271.2
67.5°	202.5	201.4	198.0	196.9
70°	142.9	138.4	137.3	135.0
72.5°	95.6	95.6	93.4	93.4
75°	58.5	52.9	51.8	52.9
77.5°	40.5	39.4	39.4	38.3
80°	27.0	25.9	28.1	24.8
82.5°	16.9	18.0	16.9	18.0
85°	11.3	13.5	12.4	12.4
87.5°	6.7	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)