

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: P246232

Luminaire Tested: **LSR8B40D010 EC8B40950 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246232
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 EC8B40950 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4067.0 lumens
Efficiency: N/A
Efficacy: 99.4 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

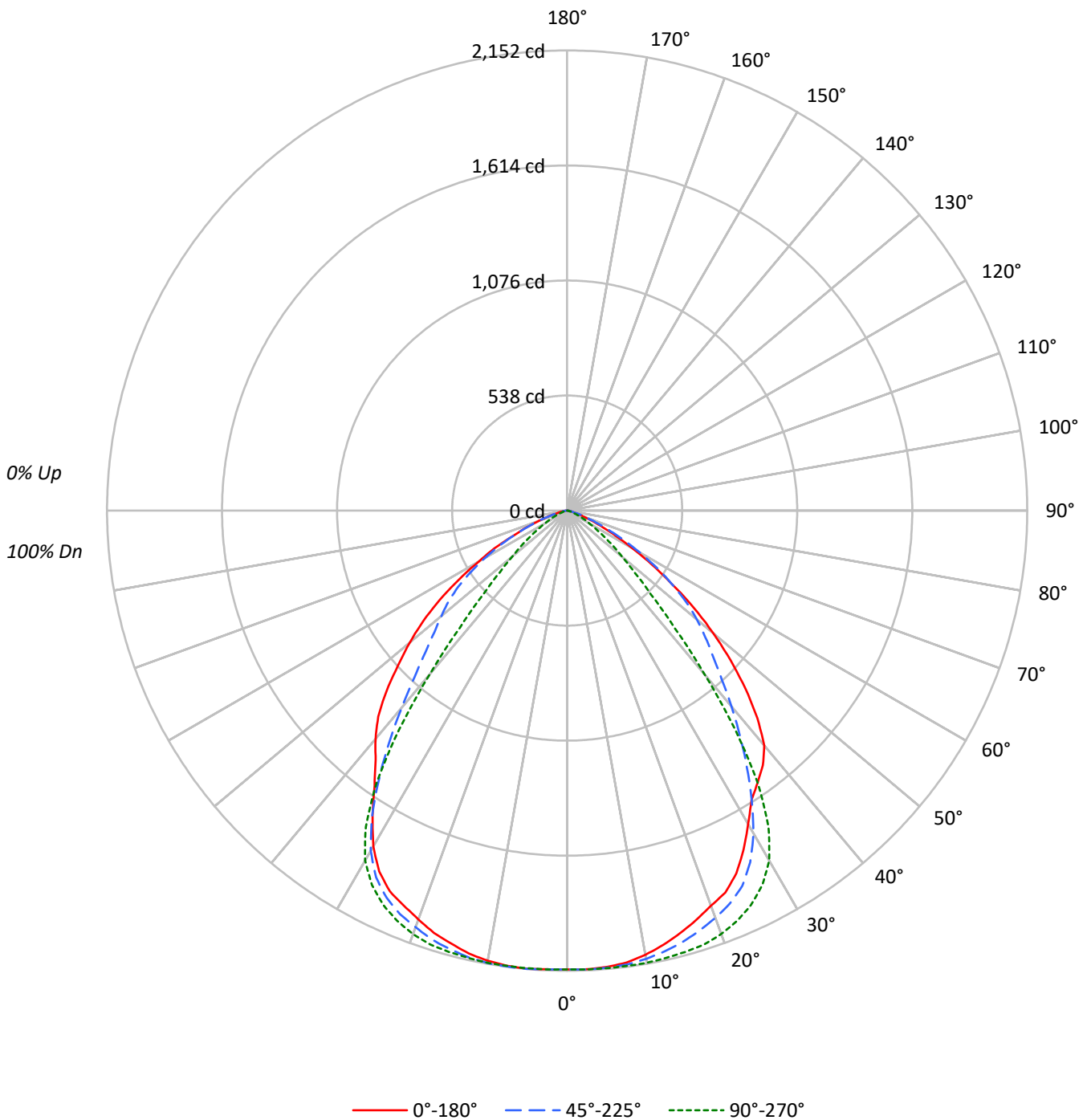
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	66169	66169	66169
5°	66316	66493	66567
10°	66037	67227	66939
15°	65304	68209	66922
20°	64521	69168	66750
25°	63683	69249	66820
30°	60247	67300	64555
35°	58450	58492	59098
40°	57724	40246	56102
45°	51437	24159	52139
50°	42768	16080	46083
55°	32074	11086	39074
60°	21740	7388	29480
65°	13112	4794	20255
70°	7267	2597	12460
75°	3288	1096	6446
80°	2859	1225	4493
85°	3255	1628	4493



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.8	5.0
10°-20°	594.7	14.6
20°-30°	902.7	22.2
30°-40°	948.1	23.3
40°-50°	710.8	17.5
50°-60°	456.1	11.2
60°-70°	195.1	4.8
70°-80°	46.1	1.1
80°-90°	8.6	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°	1702.2	41.9
0°-40°	2650.3	65.2
0°-60°	3817.2	93.9
0°-90°	4067.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4067.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2146	2146	2146	2146	2146	
5°	2142	2146	2148	2152	2150	204
15°	2046	2088	2137	2123	2096	577
25°	1872	1937	2035	1998	1964	855
35°	1553	1466	1554	1535	1570	974
45°	1180	964	554	936	1196	903
55°	597	597	206	622	727	541
65°	180	212	66	273	278	192
75°	28	32	9	55	54	40
85°	9	6	5	9	13	10
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°	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8
2.5°	2147.0	2149.3	2148.1	2148.1	2147.0	2148.1	2148.1	2150.5	2150.5	2148.1	2147.0
5°	2142.4	2144.7	2144.7	2142.4	2142.4	2148.1	2144.7	2147.0	2147.0	2145.8	2145.8
7.5°	2132.0	2132.0	2136.6	2133.2	2133.2	2136.6	2135.5	2137.8	2140.1	2141.2	2141.2
10°	2109.0	2111.3	2112.4	2112.4	2113.6	2117.0	2119.3	2124.0	2126.2	2128.6	2129.7
12.5°	2080.2	2083.6	2084.8	2083.6	2087.1	2091.7	2097.5	2103.2	2106.7	2111.3	2114.7
15°	2045.6	2045.6	2047.9	2051.4	2053.7	2060.6	2066.4	2073.3	2082.5	2088.3	2094.0
17.5°	2007.6	2009.9	2013.4	2013.4	2018.0	2029.5	2033.0	2043.3	2053.7	2059.4	2071.0
20°	1966.2	1968.4	1971.9	1974.2	1980.0	1989.2	1996.1	2005.3	2016.8	2027.2	2038.7
22.5°	1933.9	1929.3	1931.6	1933.9	1939.7	1947.7	1955.8	1967.3	1978.8	1989.2	2000.7
25°	1871.7	1872.8	1876.3	1878.6	1885.5	1892.4	1901.7	1915.5	1925.8	1937.4	1950.0
27.5°	1787.6	1788.8	1794.5	1794.5	1800.3	1811.8	1817.6	1829.1	1842.9	1854.4	1869.4
30°	1692.0	1694.3	1694.3	1698.9	1702.4	1708.1	1713.9	1725.4	1732.3	1742.7	1763.4
32.5°	1604.5	1606.8	1605.6	1604.5	1601.0	1599.9	1598.7	1601.0	1603.3	1606.8	1614.8
35°	1552.7	1546.9	1542.3	1534.2	1525.0	1513.5	1503.1	1489.3	1476.6	1466.3	1454.8
37.5°	1503.1	1502.0	1495.1	1483.5	1465.1	1444.4	1420.2	1390.2	1360.3	1328.0	1297.0
40°	1434.0	1430.5	1424.8	1408.7	1387.9	1362.6	1330.4	1293.5	1245.1	1195.6	1144.9
42.5°	1316.5	1317.7	1310.8	1298.1	1278.5	1254.3	1220.9	1180.6	1128.8	1070.0	1004.4
45°	1179.5	1179.5	1177.1	1166.8	1153.0	1133.4	1108.0	1074.6	1024.0	964.1	893.8
47.5°	1036.6	1037.8	1034.3	1032.0	1026.3	1013.6	995.2	969.8	934.1	876.5	806.3
50°	891.5	891.5	897.3	896.1	896.1	891.5	883.5	868.5	837.4	791.3	725.7
52.5°	746.4	748.7	752.1	756.7	762.5	771.7	762.5	755.6	736.0	700.3	643.9
55°	596.6	598.9	604.7	612.8	619.7	628.9	631.2	631.2	620.8	596.6	554.0
57.5°	468.8	465.3	470.0	476.9	486.1	495.3	502.2	510.3	509.1	493.0	458.4
60°	352.5	353.6	357.1	364.0	370.9	378.9	388.2	395.1	398.5	390.5	368.6
62.5°	256.9	256.9	261.5	268.4	271.8	283.4	289.1	292.6	296.0	294.9	281.0
65°	179.7	182.0	184.3	187.8	191.2	198.1	201.6	208.5	210.8	211.9	201.6
67.5°	126.7	123.2	125.6	127.8	131.3	135.9	142.8	142.8	146.3	146.3	139.4
70°	80.6	80.6	81.8	85.2	87.5	88.7	91.0	93.3	96.8	95.6	95.6
72.5°	54.1	53.0	54.1	55.3	56.5	59.9	59.9	61.0	63.4	64.5	59.9
75°	27.6	28.8	31.1	30.0	33.4	31.1	32.2	35.7	34.6	32.2	32.2
77.5°	23.0	23.0	23.0	21.9	24.2	24.2	23.0	25.3	24.2	24.2	23.0
80°	16.1	17.3	16.1	15.0	16.1	15.0	15.0	15.0	15.0	15.0	13.8
82.5°	12.7	10.4	11.5	10.4	11.5	11.5	10.4	9.2	9.2	10.4	9.2
85°	9.2	6.9	8.1	8.1	6.9	6.9	6.9	6.9	6.9	5.7	5.7
87.5°	5.7	3.5	3.5	3.5	4.6	4.6	4.6	3.5	4.6	4.6	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°	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8
2.5°	2149.3	2148.1	2150.5	2149.3	2149.3	2148.1	2149.3	2148.1	2150.5	2145.8	2147.0
5°	2149.3	2147.0	2148.1	2149.3	2150.5	2148.1	2148.1	2148.1	2150.5	2148.1	2149.3
7.5°	2144.7	2143.5	2147.0	2149.3	2148.1	2147.0	2149.3	2148.1	2150.5	2149.3	2151.6
10°	2135.5	2136.6	2138.9	2142.4	2143.5	2144.7	2147.0	2147.0	2150.5	2145.8	2148.1
12.5°	2121.6	2126.2	2132.0	2134.3	2138.9	2138.9	2141.2	2142.4	2144.7	2143.5	2147.0
15°	2104.4	2110.1	2117.0	2122.8	2128.6	2132.0	2135.5	2136.6	2140.1	2136.6	2137.8
17.5°	2083.6	2090.5	2100.9	2107.8	2117.0	2120.5	2125.1	2127.4	2130.9	2128.6	2129.7
20°	2054.8	2062.9	2074.4	2084.8	2090.5	2098.6	2104.4	2107.8	2110.1	2107.8	2109.0
22.5°	2014.5	2026.1	2041.0	2049.1	2060.6	2067.5	2068.7	2076.7	2082.5	2076.7	2079.0
25°	1967.3	1978.8	1990.3	2007.6	2018.0	2026.1	2034.1	2035.3	2041.0	2039.9	2038.7
27.5°	1889.0	1904.0	1923.5	1937.4	1951.2	1963.9	1973.1	1975.4	1981.1	1978.8	1980.0
30°	1781.8	1798.0	1816.4	1838.3	1857.9	1870.5	1882.1	1890.1	1895.9	1892.4	1891.3
32.5°	1629.8	1645.9	1665.5	1687.4	1710.5	1728.9	1742.7	1753.1	1760.0	1757.7	1751.9
35°	1455.9	1460.5	1473.2	1490.5	1510.0	1529.6	1542.3	1553.8	1561.8	1564.2	1564.2
37.5°	1277.4	1262.4	1253.2	1253.2	1264.7	1272.7	1284.3	1291.2	1303.9	1308.5	1311.9
40°	1104.6	1070.0	1037.8	1013.6	997.5	996.3	996.3	999.8	1011.3	1026.3	1040.1
42.5°	950.2	895.0	845.4	800.5	768.3	749.8	741.8	742.9	752.1	766.0	789.0
45°	827.0	757.9	695.7	641.6	597.8	569.0	555.2	554.0	560.9	577.0	602.4
47.5°	731.4	657.7	587.4	525.2	478.0	446.9	430.8	426.2	430.8	445.7	475.7
50°	651.9	575.9	503.3	438.8	388.2	355.9	340.9	335.2	340.9	353.6	383.5
52.5°	578.2	499.9	431.9	369.7	315.6	287.9	271.8	268.4	271.8	286.8	311.0
55°	493.0	426.2	359.4	297.2	250.0	222.3	209.6	206.2	209.6	223.5	248.8
57.5°	408.9	351.3	292.6	236.1	195.8	171.6	160.1	155.5	163.5	172.8	202.7
60°	330.6	284.5	235.0	185.4	152.0	130.1	120.9	119.8	122.1	133.6	154.3
62.5°	259.2	221.2	182.0	141.7	114.0	104.8	93.3	92.2	94.4	101.3	117.5
65°	186.6	162.4	132.5	103.7	81.8	69.1	64.5	65.7	67.9	72.6	87.5
67.5°	130.1	112.9	92.2	72.6	56.5	50.7	46.1	44.9	46.1	54.1	62.2
70°	87.5	77.2	62.2	55.3	39.2	31.1	32.2	28.8	33.4	33.4	40.3
72.5°	57.6	50.7	41.5	32.2	27.6	21.9	21.9	20.7	23.0	24.2	30.0
75°	30.0	23.0	23.0	16.1	11.5	5.7	10.4	9.2	8.1	9.2	11.5
77.5°	20.7	17.3	16.1	12.7	11.5	9.2	9.2	9.2	9.2	10.4	11.5
80°	12.7	12.7	9.2	8.1	6.9	5.7	6.9	6.9	6.9	6.9	8.1
82.5°	8.1	6.9	6.9	5.7	5.7	4.6	4.6	4.6	4.6	4.6	6.9
85°	6.9	4.6	4.6	3.5	4.6	8.1	3.5	4.6	4.6	4.6	3.5
87.5°	2.3	3.5	3.5	3.5	2.3	1.2	2.3	3.5	3.5	5.7	4.6
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°	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8	2145.8
2.5°	2149.3	2150.5	2150.5	2149.3	2149.3	2147.0	2151.6	2148.1	2149.3	2153.9	2150.5
5°	2151.6	2152.7	2152.7	2151.6	2151.6	2151.6	2152.7	2152.7	2151.6	2150.5	2152.7
7.5°	2156.2	2155.0	2155.0	2152.7	2152.7	2150.5	2152.7	2149.3	2151.6	2149.3	2152.7
10°	2150.5	2151.6	2150.5	2149.3	2149.3	2148.1	2148.1	2144.7	2145.8	2142.4	2144.7
12.5°	2147.0	2145.8	2145.8	2143.5	2141.2	2138.9	2137.8	2134.3	2134.3	2126.2	2129.7
15°	2137.8	2138.9	2135.5	2130.9	2128.6	2122.8	2120.5	2115.9	2111.3	2105.5	2106.7
17.5°	2129.7	2126.2	2121.6	2117.0	2107.8	2103.2	2098.6	2091.7	2089.4	2082.5	2080.2
20°	2105.5	2103.2	2097.5	2089.4	2083.6	2073.3	2068.7	2061.8	2056.0	2049.1	2045.6
22.5°	2074.4	2072.1	2065.2	2057.1	2047.9	2043.3	2038.7	2026.1	2020.3	2013.4	2012.2
25°	2035.3	2031.8	2024.9	2015.7	2011.1	1998.4	1993.8	1984.6	1982.3	1975.4	1974.2
27.5°	1975.4	1970.8	1962.7	1951.2	1943.1	1935.0	1930.5	1923.5	1921.2	1914.3	1913.2
30°	1885.5	1879.8	1863.6	1859.0	1845.2	1837.1	1837.1	1827.9	1829.1	1824.5	1824.5
32.5°	1743.9	1734.6	1722.0	1712.7	1703.5	1698.9	1698.9	1695.5	1697.8	1697.8	1700.1
35°	1556.1	1543.4	1536.5	1530.8	1530.8	1535.4	1549.2	1552.7	1559.6	1565.3	1569.9
37.5°	1315.4	1314.2	1322.3	1329.2	1346.5	1366.1	1390.2	1411.0	1430.5	1444.4	1458.2
40°	1055.1	1083.9	1106.9	1139.2	1165.6	1203.6	1247.4	1283.1	1316.5	1340.7	1366.1
42.5°	823.5	860.4	908.8	956.0	1003.2	1055.1	1112.7	1162.2	1206.0	1239.3	1265.8
45°	641.6	692.2	751.0	810.9	871.9	936.4	996.3	1047.0	1093.1	1127.6	1154.1
47.5°	517.2	572.5	639.2	704.9	774.0	842.0	908.8	952.6	990.6	1018.2	1042.4
50°	427.3	486.1	556.3	631.2	700.3	768.3	825.8	868.5	899.6	923.8	938.7
52.5°	357.1	419.3	494.1	569.0	638.1	700.3	752.1	784.4	809.7	827.0	840.8
55°	294.9	354.8	425.0	495.3	563.2	622.0	664.6	688.8	708.4	718.7	726.8
57.5°	240.7	296.0	360.5	425.0	483.8	532.2	565.5	589.7	598.9	607.0	605.9
60°	188.9	240.7	299.5	354.8	405.4	444.6	468.8	482.6	489.5	493.0	490.7
62.5°	148.6	195.8	240.7	289.1	326.0	359.4	382.4	382.4	385.9	387.0	390.5
65°	110.6	146.3	185.4	221.2	251.1	273.0	285.7	289.1	293.7	292.6	290.3
67.5°	81.8	108.3	137.1	163.5	184.3	198.1	207.3	215.4	214.2	211.9	210.8
70°	56.5	73.7	99.1	115.2	130.1	144.0	146.3	147.4	148.6	149.7	147.4
72.5°	39.2	51.8	65.7	79.5	88.7	94.4	100.2	101.3	101.3	101.3	100.2
75°	19.6	26.5	39.2	44.9	53.0	55.3	59.9	59.9	63.4	58.7	57.6
77.5°	17.3	20.7	27.6	32.2	35.7	39.2	40.3	43.8	42.6	40.3	41.5
80°	10.4	12.7	17.3	19.6	24.2	25.3	26.5	27.6	26.5	27.6	27.6
82.5°	8.1	9.2	11.5	11.5	15.0	15.0	16.1	16.1	17.3	17.3	17.3
85°	4.6	8.1	6.9	13.8	9.2	9.2	11.5	13.8	11.5	11.5	13.8
87.5°	4.6	4.6	3.5	4.6	4.6	4.6	5.7	6.9	6.9	8.1	6.9
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: P246232

CATALOG NUMBER: LSR8B40D010 EC8B40950 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2145.8	2145.8	2145.8	2145.8
2.5°	2149.3	2151.6	2148.1	2147.0
5°	2152.7	2152.7	2150.5	2150.5
7.5°	2152.7	2152.7	2149.3	2147.0
10°	2143.5	2143.5	2140.1	2137.8
12.5°	2126.2	2126.2	2125.1	2121.6
15°	2104.4	2104.4	2099.8	2096.3
17.5°	2074.4	2076.7	2071.0	2071.0
20°	2042.2	2041.0	2036.4	2034.1
22.5°	2008.8	2006.5	2005.3	1998.4
25°	1973.1	1970.8	1967.3	1963.9
27.5°	1912.0	1910.9	1907.4	1902.8
30°	1818.7	1817.6	1813.0	1813.0
32.5°	1697.8	1696.6	1692.0	1693.2
35°	1572.2	1576.8	1574.5	1569.9
37.5°	1467.4	1470.9	1473.2	1470.9
40°	1379.9	1390.2	1391.4	1393.7
42.5°	1286.6	1300.4	1305.0	1307.3
45°	1174.8	1187.5	1197.9	1195.6
47.5°	1060.8	1070.0	1079.2	1072.3
50°	951.4	957.2	960.6	960.6
52.5°	847.7	847.7	846.6	847.7
55°	729.1	729.1	724.5	726.8
57.5°	604.7	607.0	603.5	597.8
60°	489.5	483.8	481.5	478.0
62.5°	381.3	381.3	373.2	383.5
65°	285.7	282.2	278.7	277.6
67.5°	207.3	206.2	202.7	201.6
70°	146.3	141.7	140.5	138.2
72.5°	97.9	97.9	95.6	95.6
75°	59.9	54.1	53.0	54.1
77.5°	41.5	40.3	40.3	39.2
80°	27.6	26.5	28.8	25.3
82.5°	17.3	18.4	17.3	18.4
85°	11.5	13.8	12.7	12.7
87.5°	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)