

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: P244648

Luminaire Tested: **LSR8B40D010 EC8B40950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244648
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4114.0 lumens
Efficiency: N/A
Efficacy: 100.6 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

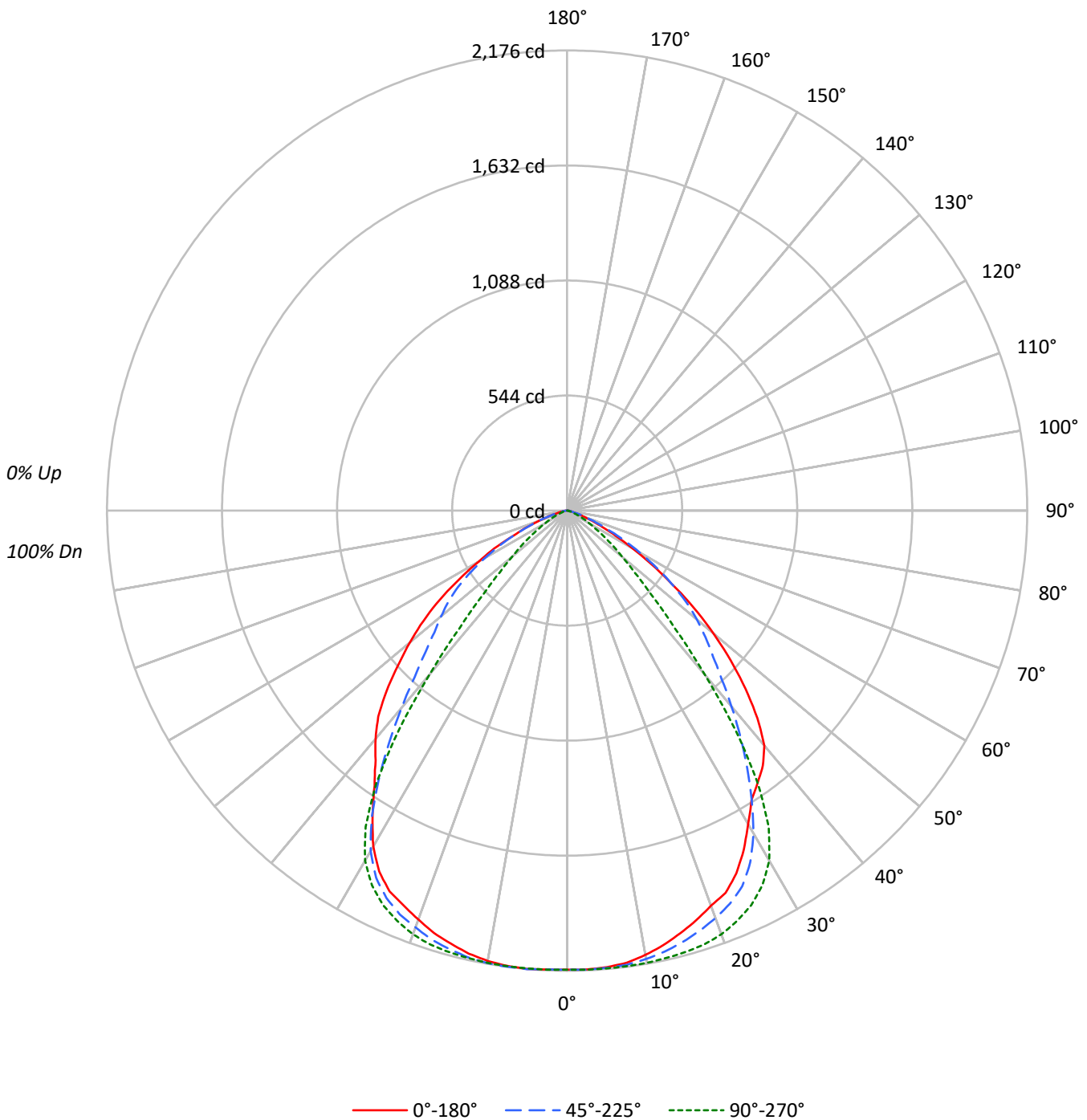
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	66933	66933	66933
5°	67081	67263	67334
10°	66798	68003	67712
15°	66061	68998	67695
20°	65266	69969	67521
25°	64418	70049	67589
30°	60944	68080	65299
35°	59124	59165	59783
40°	58392	40709	56750
45°	52030	24439	52741
50°	43262	16268	46615
55°	32445	11215	39525
60°	21986	7475	29819
65°	13265	4845	20489
70°	7357	2624	12604
75°	3336	1108	6529
80°	2895	1243	4546
85°	3290	1628	4529



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.2	5.0
10°-20°	601.6	14.6
20°-30°	913.1	22.2
30°-40°	959.1	23.3
40°-50°	719.0	17.5
50°-60°	461.4	11.2
60°-70°	197.4	4.8
70°-80°	46.6	1.1
80°-90°	8.7	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°	1721.9	41.9
0°-40°	2681.0	65.2
0°-60°	3861.3	93.9
0°-90°	4114.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4114.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2171	2171	2171	2171	2171	
5°	2167	2171	2173	2176	2175	206
15°	2069	2112	2161	2147	2120	584
25°	1893	1960	2059	2022	1986	865
35°	1571	1483	1572	1553	1588	986
45°	1193	975	560	947	1209	914
55°	604	604	209	629	735	547
65°	182	214	66	276	281	194
75°	28	33	9	56	55	41
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°	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6
2.5°	2171.8	2174.1	2173.0	2173.0	2171.8	2173.0	2173.0	2175.3	2175.3	2173.0	2171.8
5°	2167.1	2169.5	2169.5	2167.1	2167.1	2173.0	2169.5	2171.8	2171.8	2170.6	2170.6
7.5°	2156.7	2156.7	2161.3	2157.8	2157.8	2161.3	2160.1	2162.5	2164.8	2166.0	2166.0
10°	2133.3	2135.7	2136.8	2136.8	2138.0	2141.5	2143.8	2148.5	2150.8	2153.2	2154.3
12.5°	2104.2	2107.7	2108.9	2107.7	2111.2	2115.9	2121.7	2127.5	2131.0	2135.7	2139.2
15°	2069.3	2069.3	2071.6	2075.1	2077.4	2084.4	2090.2	2097.2	2106.5	2112.4	2118.2
17.5°	2030.8	2033.2	2036.6	2036.6	2041.3	2052.9	2056.4	2066.9	2077.4	2083.2	2094.9
20°	1988.9	1991.2	1994.7	1997.0	2002.9	2012.2	2019.2	2028.5	2040.1	2050.6	2062.3
22.5°	1956.2	1951.6	1953.9	1956.2	1962.1	1970.2	1978.4	1990.0	2001.7	2012.2	2023.8
25°	1893.3	1894.5	1898.0	1900.3	1907.3	1914.3	1923.6	1937.6	1948.1	1959.7	1972.5
27.5°	1808.3	1809.4	1815.3	1815.3	1821.1	1832.7	1838.6	1850.2	1864.2	1875.8	1891.0
30°	1711.6	1713.9	1713.9	1718.6	1722.0	1727.9	1733.7	1745.4	1752.3	1762.8	1783.8
32.5°	1623.0	1625.3	1624.2	1623.0	1619.5	1618.4	1617.2	1619.5	1621.9	1625.3	1633.5
35°	1570.6	1564.8	1560.1	1552.0	1542.6	1531.0	1520.5	1506.5	1493.7	1483.2	1471.6
37.5°	1520.5	1519.3	1512.3	1500.7	1482.0	1461.1	1436.6	1406.3	1376.0	1343.4	1311.9
40°	1450.6	1447.1	1441.3	1425.0	1404.0	1378.3	1345.7	1308.4	1259.5	1209.4	1158.1
42.5°	1331.7	1332.9	1325.9	1313.1	1293.3	1268.8	1235.0	1194.3	1141.8	1082.4	1016.0
45°	1193.1	1193.1	1190.8	1180.3	1166.3	1146.5	1120.8	1087.1	1035.8	975.2	904.1
47.5°	1048.6	1049.8	1046.3	1044.0	1038.1	1025.3	1006.7	981.0	944.9	886.7	815.6
50°	901.8	901.8	907.6	906.5	906.5	901.8	893.7	878.5	847.1	800.4	734.0
52.5°	755.0	757.3	760.8	765.5	771.3	780.6	771.3	764.3	744.5	708.4	651.3
55°	603.5	605.9	611.7	619.8	626.8	636.2	638.5	638.5	628.0	603.5	560.4
57.5°	474.2	470.7	475.4	482.4	491.7	501.0	508.0	516.2	515.0	498.7	463.7
60°	356.5	357.7	361.2	368.2	375.2	383.3	392.7	399.6	403.1	395.0	372.8
62.5°	259.8	259.8	264.5	271.5	275.0	286.6	292.4	295.9	299.4	298.3	284.3
65°	181.8	184.1	186.4	189.9	193.4	200.4	203.9	210.9	213.2	214.4	203.9
67.5°	128.2	124.7	127.0	129.3	132.8	137.5	144.5	144.5	148.0	148.0	141.0
70°	81.6	81.6	82.7	86.2	88.5	89.7	92.1	94.4	97.9	96.7	96.7
72.5°	54.8	53.6	54.8	55.9	57.1	60.6	60.6	61.8	64.1	65.3	60.6
75°	28.0	29.1	31.4	30.3	33.8	31.4	32.6	36.1	35.0	32.6	32.6
77.5°	23.3	23.3	23.3	22.2	24.5	24.5	23.3	25.6	24.5	24.5	23.3
80°	16.3	17.5	16.3	15.1	16.3	15.1	15.1	15.1	15.1	15.1	14.0
82.5°	12.8	10.5	11.7	10.5	11.7	11.7	10.5	9.3	9.3	10.5	9.3
85°	9.3	7.0	8.2	8.2	7.0	7.0	7.0	7.0	7.0	5.8	5.8
87.5°	5.8	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°	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6
2.5°	2174.1	2173.0	2175.3	2174.1	2174.1	2173.0	2174.1	2173.0	2175.3	2170.6	2171.8
5°	2174.1	2171.8	2173.0	2174.1	2175.3	2173.0	2173.0	2173.0	2175.3	2173.0	2174.1
7.5°	2169.5	2168.3	2171.8	2174.1	2173.0	2171.8	2174.1	2173.0	2175.3	2174.1	2176.4
10°	2160.1	2161.3	2163.6	2167.1	2168.3	2169.5	2171.8	2171.8	2175.3	2170.6	2173.0
12.5°	2146.2	2150.8	2156.7	2159.0	2163.6	2163.6	2166.0	2167.1	2169.5	2168.3	2171.8
15°	2128.7	2134.5	2141.5	2147.3	2153.2	2156.7	2160.1	2161.3	2164.8	2161.3	2162.5
17.5°	2107.7	2114.7	2125.2	2132.2	2141.5	2145.0	2149.6	2152.0	2155.5	2153.2	2154.3
20°	2078.6	2086.8	2098.4	2108.9	2114.7	2122.8	2128.7	2132.2	2134.5	2132.2	2133.3
22.5°	2037.8	2049.5	2064.6	2072.8	2084.4	2091.4	2092.6	2100.7	2106.5	2100.7	2103.1
25°	1990.0	2001.7	2013.3	2030.8	2041.3	2049.5	2057.6	2058.8	2064.6	2063.4	2062.3
27.5°	1910.8	1926.0	1945.8	1959.7	1973.7	1986.5	1995.9	1998.2	2004.0	2001.7	2002.9
30°	1802.4	1818.8	1837.4	1859.5	1879.4	1892.2	1903.8	1912.0	1917.8	1914.3	1913.1
32.5°	1648.7	1665.0	1684.8	1706.9	1730.2	1748.8	1762.8	1773.3	1780.3	1778.0	1772.2
35°	1472.7	1477.4	1490.2	1507.7	1527.5	1547.3	1560.1	1571.7	1579.9	1582.2	1582.2
37.5°	1292.1	1277.0	1267.7	1267.7	1279.3	1287.5	1299.1	1306.1	1318.9	1323.6	1327.1
40°	1117.3	1082.4	1049.8	1025.3	1009.0	1007.8	1007.8	1011.3	1023.0	1038.1	1052.1
42.5°	961.2	905.3	855.2	809.8	777.1	758.5	750.3	751.5	760.8	774.8	798.1
45°	836.6	766.7	703.7	649.0	604.7	575.6	561.6	560.4	567.4	583.7	609.4
47.5°	739.9	665.3	594.2	531.3	483.5	452.1	435.8	431.1	435.8	450.9	481.2
50°	659.5	582.6	509.2	443.9	392.7	360.0	344.9	339.1	344.9	357.7	388.0
52.5°	584.9	505.7	436.9	374.0	319.2	291.3	275.0	271.5	275.0	290.1	314.6
55°	498.7	431.1	363.5	300.6	252.8	224.9	212.0	208.6	212.0	226.0	251.7
57.5°	413.6	355.4	295.9	238.8	198.1	173.6	162.0	157.3	165.4	174.8	205.1
60°	334.4	287.8	237.7	187.6	153.8	131.7	122.3	121.2	123.5	135.2	156.1
62.5°	262.2	223.7	184.1	143.3	115.3	106.0	94.4	93.2	95.5	102.5	118.9
65°	188.8	164.3	134.0	104.9	82.7	69.9	65.3	66.4	68.7	73.4	88.5
67.5°	131.7	114.2	93.2	73.4	57.1	51.3	46.6	45.4	46.6	54.8	62.9
70°	88.5	78.1	62.9	55.9	39.6	31.4	32.6	29.1	33.8	33.8	40.8
72.5°	58.2	51.3	41.9	32.6	28.0	22.2	22.2	21.0	23.3	24.5	30.3
75°	30.3	23.3	23.3	16.3	11.7	5.8	10.5	9.3	8.2	9.3	11.7
77.5°	21.0	17.5	16.3	12.8	11.7	9.3	9.3	9.3	9.3	10.5	11.7
80°	12.8	12.8	9.3	8.2	7.0	5.8	7.0	7.0	7.0	7.0	8.2
82.5°	8.2	7.0	7.0	5.8	5.8	4.6	4.6	4.6	4.6	4.6	7.0
85°	7.0	4.6	4.6	3.5	4.6	8.2	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	5.8	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°	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6	2170.6
2.5°	2174.1	2175.3	2175.3	2174.1	2174.1	2171.8	2176.4	2173.0	2174.1	2178.8	2175.3
5°	2176.4	2177.6	2177.6	2176.4	2176.4	2176.4	2177.6	2177.6	2176.4	2175.3	2177.6
7.5°	2181.1	2179.9	2179.9	2177.6	2177.6	2175.3	2177.6	2174.1	2176.4	2174.1	2177.6
10°	2175.3	2176.4	2175.3	2174.1	2174.1	2173.0	2173.0	2169.5	2170.6	2167.1	2169.5
12.5°	2171.8	2170.6	2170.6	2168.3	2166.0	2163.6	2162.5	2159.0	2159.0	2150.8	2154.3
15°	2162.5	2163.6	2160.1	2155.5	2153.2	2147.3	2145.0	2140.3	2135.7	2129.9	2131.0
17.5°	2154.3	2150.8	2146.2	2141.5	2132.2	2127.5	2122.8	2115.9	2113.5	2106.5	2104.2
20°	2129.9	2127.5	2121.7	2113.5	2107.7	2097.2	2092.6	2085.6	2079.7	2072.8	2069.3
22.5°	2098.4	2096.0	2089.1	2080.9	2071.6	2066.9	2062.3	2049.5	2043.6	2036.6	2035.5
25°	2058.8	2055.3	2048.3	2039.0	2034.3	2021.5	2016.8	2007.5	2005.2	1998.2	1997.0
27.5°	1998.2	1993.5	1985.4	1973.7	1965.6	1957.4	1952.8	1945.8	1943.4	1936.4	1935.3
30°	1907.3	1901.5	1885.2	1880.5	1866.5	1858.4	1858.4	1849.0	1850.2	1845.6	1845.6
32.5°	1764.0	1754.7	1741.9	1732.5	1723.2	1718.6	1718.6	1715.1	1717.4	1717.4	1719.7
35°	1574.1	1561.3	1554.3	1548.5	1548.5	1553.1	1567.1	1570.6	1577.6	1583.4	1588.1
37.5°	1330.6	1329.4	1337.6	1344.6	1362.0	1381.8	1406.3	1427.3	1447.1	1461.1	1475.0
40°	1067.3	1096.4	1119.7	1152.3	1179.1	1217.6	1261.8	1297.9	1331.7	1356.2	1381.8
42.5°	833.1	870.3	919.3	967.0	1014.8	1067.3	1125.5	1175.6	1219.9	1253.7	1280.5
45°	649.0	700.2	759.7	820.3	882.0	947.3	1007.8	1059.1	1105.7	1140.7	1167.5
47.5°	523.1	579.1	646.6	713.1	783.0	851.7	919.3	963.6	1002.0	1030.0	1054.5
50°	432.3	491.7	562.8	638.5	708.4	777.1	835.4	878.5	910.0	934.4	949.6
52.5°	361.2	424.1	499.8	575.6	645.5	708.4	760.8	793.5	819.1	836.6	850.5
55°	298.3	358.9	429.9	501.0	569.7	629.2	672.3	696.8	716.5	727.0	735.2
57.5°	243.5	299.4	364.7	429.9	489.4	538.3	572.1	596.5	605.9	614.0	612.9
60°	191.1	243.5	302.9	358.9	410.1	449.7	474.2	488.2	495.2	498.7	496.3
62.5°	150.3	198.1	243.5	292.4	329.7	363.5	386.8	386.8	390.3	391.5	395.0
65°	111.8	148.0	187.6	223.7	254.0	276.1	289.0	292.4	297.1	295.9	293.6
67.5°	82.7	109.5	138.6	165.4	186.4	200.4	209.7	217.9	216.7	214.4	213.2
70°	57.1	74.6	100.2	116.5	131.7	145.7	148.0	149.1	150.3	151.5	149.1
72.5°	39.6	52.4	66.4	80.4	89.7	95.5	101.4	102.5	102.5	102.5	101.4
75°	19.8	26.8	39.6	45.4	53.6	55.9	60.6	60.6	64.1	59.4	58.2
77.5°	17.5	21.0	28.0	32.6	36.1	39.6	40.8	44.3	43.1	40.8	41.9
80°	10.5	12.8	17.5	19.8	24.5	25.6	26.8	28.0	26.8	28.0	28.0
82.5°	8.2	9.3	11.7	11.7	15.1	15.1	16.3	16.3	17.5	17.5	17.5
85°	4.6	8.2	7.0	14.0	9.3	9.3	11.7	14.0	11.7	11.7	14.0
87.5°	4.6	4.6	3.5	4.6	4.6	4.6	5.8	7.0	7.0	8.2	7.0
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: P244648

CATALOG NUMBER: LSR8B40D010 EC8B40950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2170.6	2170.6	2170.6	2170.6
2.5°	2174.1	2176.4	2173.0	2171.8
5°	2177.6	2177.6	2175.3	2175.3
7.5°	2177.6	2177.6	2174.1	2171.8
10°	2168.3	2168.3	2164.8	2162.5
12.5°	2150.8	2150.8	2149.6	2146.2
15°	2128.7	2128.7	2124.0	2120.5
17.5°	2098.4	2100.7	2094.9	2094.9
20°	2065.8	2064.6	2060.0	2057.6
22.5°	2032.0	2029.7	2028.5	2021.5
25°	1995.9	1993.5	1990.0	1986.5
27.5°	1934.1	1932.9	1929.4	1924.8
30°	1839.7	1838.6	1833.9	1833.9
32.5°	1717.4	1716.2	1711.6	1712.7
35°	1590.4	1595.1	1592.7	1588.1
37.5°	1484.4	1487.9	1490.2	1487.9
40°	1395.8	1406.3	1407.5	1409.8
42.5°	1301.5	1315.4	1320.1	1322.4
45°	1188.4	1201.2	1211.7	1209.4
47.5°	1073.1	1082.4	1091.7	1084.7
50°	962.4	968.2	971.7	971.7
52.5°	857.5	857.5	856.4	857.5
55°	737.5	737.5	732.9	735.2
57.5°	611.7	614.0	610.5	604.7
60°	495.2	489.4	487.0	483.5
62.5°	385.7	385.7	377.5	388.0
65°	289.0	285.5	282.0	280.8
67.5°	209.7	208.6	205.1	203.9
70°	148.0	143.3	142.1	139.8
72.5°	99.0	99.0	96.7	96.7
75°	60.6	54.8	53.6	54.8
77.5°	41.9	40.8	40.8	39.6
80°	28.0	26.8	29.1	25.6
82.5°	17.5	18.6	17.5	18.6
85°	11.7	14.0	12.8	12.8
87.5°	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)