

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: P245026

Luminaire Tested: **LSR8B40D010 EC8B40827 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245026
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 EC8B40827 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4163.0 lumens
Efficiency: N/A
Efficacy: 101.8 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

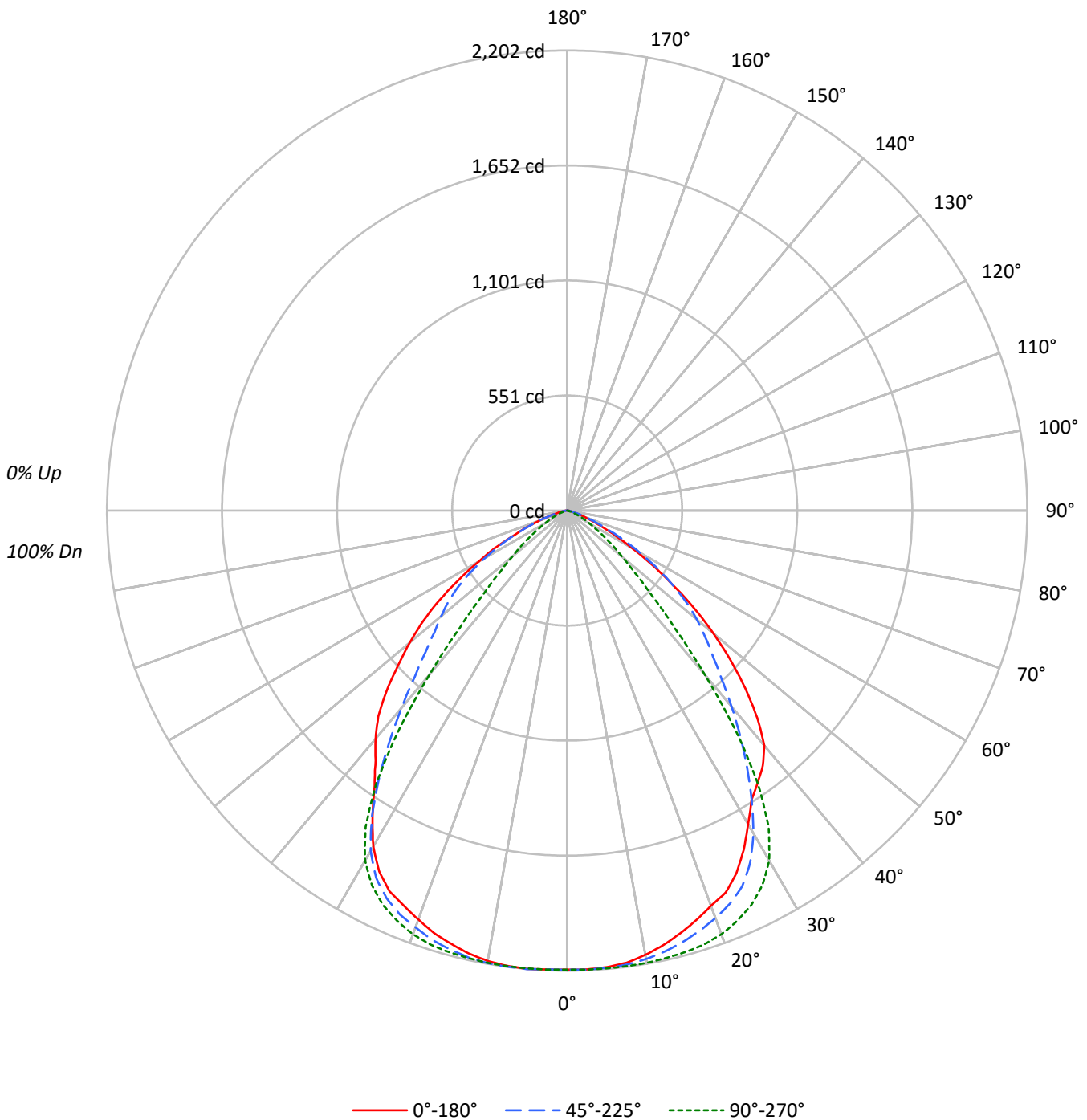
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	67732	67732	67732
5°	67879	68062	68136
10°	67593	68814	68517
15°	66846	69818	68503
20°	66044	70802	68325
25°	65187	70882	68395
30°	61671	68888	66079
35°	59828	59873	60494
40°	59089	41196	57426
45°	52649	24731	53369
50°	43780	16459	47172
55°	32832	11349	39993
60°	22251	7561	30176
65°	13418	4903	20729
70°	7438	2660	12758
75°	3372	1120	6600
80°	2930	1261	4599
85°	3326	1663	4599



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.6	5.0
10°-20°	608.8	14.6
20°-30°	924.0	22.2
30°-40°	970.5	23.3
40°-50°	727.6	17.5
50°-60°	466.8	11.2
60°-70°	199.7	4.8
70°-80°	47.2	1.1
80°-90°	8.8	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°	1742.4	41.9
0°-40°	2712.9	65.2
0°-60°	3907.3	93.9
0°-90°	4163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4163.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2196	2196	2196	2196	2196	
5°	2193	2196	2199	2202	2201	208
15°	2094	2138	2187	2173	2146	591
25°	1916	1983	2083	2046	2010	875
35°	1589	1501	1590	1572	1607	997
45°	1207	987	567	958	1224	925
55°	611	611	211	637	744	554
65°	184	217	67	279	284	196
75°	28	33	9	57	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°	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5
2.5°	2197.7	2200.0	2198.8	2198.8	2197.7	2198.8	2198.8	2201.2	2201.2	2198.8	2197.7
5°	2192.9	2195.3	2195.3	2192.9	2192.9	2198.8	2195.3	2197.7	2197.7	2196.5	2196.5
7.5°	2182.3	2182.3	2187.0	2183.5	2183.5	2187.0	2185.9	2188.2	2190.6	2191.8	2191.8
10°	2158.7	2161.1	2162.3	2162.3	2163.5	2167.0	2169.4	2174.1	2176.4	2178.8	2180.0
12.5°	2129.3	2132.8	2134.0	2132.8	2136.4	2141.1	2147.0	2152.9	2156.4	2161.1	2164.7
15°	2093.9	2093.9	2096.3	2099.8	2102.2	2109.2	2115.1	2122.2	2131.6	2137.5	2143.4
17.5°	2055.0	2057.4	2060.9	2060.9	2065.6	2077.4	2080.9	2091.6	2102.2	2108.1	2119.9
20°	2012.6	2014.9	2018.5	2020.8	2026.7	2036.1	2043.2	2052.6	2064.4	2075.1	2086.8
22.5°	1979.5	1974.8	1977.2	1979.5	1985.5	1993.7	2002.0	2013.7	2025.5	2036.1	2047.9
25°	1915.9	1917.1	1920.6	1922.9	1930.0	1937.1	1946.5	1960.7	1971.3	1983.1	1996.0
27.5°	1829.8	1831.0	1836.9	1836.9	1842.8	1854.6	1860.5	1872.3	1886.4	1898.2	1913.5
30°	1732.0	1734.3	1734.3	1739.0	1742.6	1748.5	1754.4	1766.2	1773.2	1783.8	1805.1
32.5°	1642.4	1644.7	1643.5	1642.4	1638.8	1637.6	1636.4	1638.8	1641.2	1644.7	1653.0
35°	1589.3	1583.4	1578.7	1570.4	1561.0	1549.2	1538.6	1524.5	1511.5	1500.9	1489.1
37.5°	1538.6	1537.4	1530.3	1518.5	1499.7	1478.5	1453.7	1423.1	1392.4	1359.4	1327.6
40°	1467.9	1464.3	1458.4	1441.9	1420.7	1394.8	1361.8	1324.0	1274.5	1223.8	1171.9
42.5°	1347.6	1348.8	1341.7	1328.7	1308.7	1283.9	1249.7	1208.5	1155.4	1095.3	1028.1
45°	1207.3	1207.3	1204.9	1194.3	1180.2	1160.1	1134.2	1100.0	1048.1	986.8	914.9
47.5°	1061.1	1062.3	1058.7	1056.4	1050.5	1037.5	1018.7	992.7	956.2	897.2	825.3
50°	912.6	912.6	918.4	917.3	917.3	912.6	904.3	889.0	857.1	810.0	742.8
52.5°	764.0	766.4	769.9	774.6	780.5	789.9	780.5	773.4	753.4	716.8	659.1
55°	610.7	613.1	619.0	627.2	634.3	643.7	646.1	646.1	635.5	610.7	567.1
57.5°	479.9	476.3	481.0	488.1	497.5	507.0	514.0	522.3	521.1	504.6	469.2
60°	360.8	362.0	365.5	372.6	379.6	387.9	397.3	404.4	407.9	399.7	377.3
62.5°	262.9	262.9	267.6	274.7	278.2	290.0	295.9	299.5	303.0	301.8	287.7
65°	183.9	186.3	188.6	192.2	195.7	202.8	206.3	213.4	215.8	216.9	206.3
67.5°	129.7	126.2	128.5	130.9	134.4	139.1	146.2	146.2	149.7	149.7	142.7
70°	82.5	82.5	83.7	87.2	89.6	90.8	93.2	95.5	99.0	97.9	97.9
72.5°	55.4	54.2	55.4	56.6	57.8	61.3	61.3	62.5	64.9	66.0	61.3
75°	28.3	29.5	31.8	30.7	34.2	31.8	33.0	36.6	35.4	33.0	33.0
77.5°	23.6	23.6	23.6	22.4	24.8	24.8	23.6	25.9	24.8	24.8	23.6
80°	16.5	17.7	16.5	15.3	16.5	15.3	15.3	15.3	15.3	15.3	14.1
82.5°	13.0	10.6	11.8	10.6	11.8	11.8	10.6	9.4	9.4	10.6	9.4
85°	9.4	7.1	8.3	8.3	7.1	7.1	7.1	7.1	7.1	5.9	5.9
87.5°	5.9	3.5	3.5	3.5	4.7	4.7	4.7	3.5	4.7	4.7	2.4
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°	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5
2.5°	2200.0	2198.8	2201.2	2200.0	2200.0	2198.8	2200.0	2198.8	2201.2	2196.5	2197.7
5°	2200.0	2197.7	2198.8	2200.0	2201.2	2198.8	2198.8	2198.8	2201.2	2198.8	2200.0
7.5°	2195.3	2194.1	2197.7	2200.0	2198.8	2197.7	2200.0	2198.8	2201.2	2200.0	2202.4
10°	2185.9	2187.0	2189.4	2192.9	2194.1	2195.3	2197.7	2197.7	2201.2	2196.5	2198.8
12.5°	2171.7	2176.4	2182.3	2184.7	2189.4	2189.4	2191.8	2192.9	2195.3	2194.1	2197.7
15°	2154.0	2159.9	2167.0	2172.9	2178.8	2182.3	2185.9	2187.0	2190.6	2187.0	2188.2
17.5°	2132.8	2139.9	2150.5	2157.6	2167.0	2170.5	2175.2	2177.6	2181.2	2178.8	2180.0
20°	2103.3	2111.6	2123.4	2134.0	2139.9	2148.1	2154.0	2157.6	2159.9	2157.6	2158.7
22.5°	2062.1	2073.9	2089.2	2097.4	2109.2	2116.3	2117.5	2125.7	2131.6	2125.7	2128.1
25°	2013.7	2025.5	2037.3	2055.0	2065.6	2073.9	2082.1	2083.3	2089.2	2088.0	2086.8
27.5°	1933.6	1948.9	1968.9	1983.1	1997.2	2010.2	2019.6	2022.0	2027.9	2025.5	2026.7
30°	1823.9	1840.4	1859.3	1881.7	1901.7	1914.7	1926.5	1934.7	1940.6	1937.1	1935.9
32.5°	1668.3	1684.8	1704.8	1727.2	1750.8	1769.7	1783.8	1794.5	1801.5	1799.2	1793.3
35°	1490.3	1495.0	1508.0	1525.6	1545.7	1565.7	1578.7	1590.5	1598.7	1601.1	1601.1
37.5°	1307.5	1292.2	1282.8	1282.8	1294.5	1302.8	1314.6	1321.7	1334.6	1339.3	1342.9
40°	1130.7	1095.3	1062.3	1037.5	1021.0	1019.8	1019.8	1023.4	1035.2	1050.5	1064.6
42.5°	972.7	916.1	865.4	819.4	786.4	767.5	759.3	760.5	769.9	784.0	807.6
45°	846.5	775.8	712.1	656.7	611.9	582.4	568.3	567.1	574.2	590.7	616.6
47.5°	748.7	673.2	601.3	537.6	489.3	457.4	440.9	436.2	440.9	456.3	486.9
50°	667.3	589.5	515.2	449.2	397.3	364.3	349.0	343.1	349.0	362.0	392.6
52.5°	591.9	511.7	442.1	378.5	323.0	294.7	278.2	274.7	278.2	293.6	318.3
55°	504.6	436.2	367.8	304.2	255.9	227.6	214.6	211.1	214.6	228.7	254.7
57.5°	418.6	359.6	299.5	241.7	200.4	175.7	163.9	159.2	167.4	176.8	207.5
60°	338.4	291.2	240.5	189.8	155.6	133.2	123.8	122.6	125.0	136.8	158.0
62.5°	265.3	226.4	186.3	145.0	116.7	107.3	95.5	94.3	96.7	103.7	120.3
65°	191.0	166.3	135.6	106.1	83.7	70.7	66.0	67.2	69.6	74.3	89.6
67.5°	133.2	115.5	94.3	74.3	57.8	51.9	47.2	46.0	47.2	55.4	63.7
70°	89.6	79.0	63.7	56.6	40.1	31.8	33.0	29.5	34.2	34.2	41.3
72.5°	58.9	51.9	42.4	33.0	28.3	22.4	22.4	21.2	23.6	24.8	30.7
75°	30.7	23.6	23.6	16.5	11.8	5.9	10.6	9.4	8.3	9.4	11.8
77.5°	21.2	17.7	16.5	13.0	11.8	9.4	9.4	9.4	9.4	10.6	11.8
80°	13.0	13.0	9.4	8.3	7.1	5.9	7.1	7.1	7.1	7.1	8.3
82.5°	8.3	7.1	7.1	5.9	5.9	4.7	4.7	4.7	4.7	4.7	7.1
85°	7.1	4.7	4.7	3.5	4.7	8.3	3.5	4.7	4.7	4.7	3.5
87.5°	2.4	3.5	3.5	3.5	2.4	1.2	2.4	3.5	3.5	5.9	4.7
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°	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5
2.5°	2200.0	2201.2	2201.2	2200.0	2200.0	2197.7	2202.4	2198.8	2200.0	2204.7	2201.2
5°	2202.4	2203.5	2203.5	2202.4	2202.4	2202.4	2203.5	2203.5	2202.4	2201.2	2203.5
7.5°	2207.1	2205.9	2205.9	2203.5	2203.5	2201.2	2203.5	2200.0	2202.4	2200.0	2203.5
10°	2201.2	2202.4	2201.2	2200.0	2200.0	2198.8	2198.8	2195.3	2196.5	2192.9	2195.3
12.5°	2197.7	2196.5	2196.5	2194.1	2191.8	2189.4	2188.2	2184.7	2184.7	2176.4	2180.0
15°	2188.2	2189.4	2185.9	2181.2	2178.8	2172.9	2170.5	2165.8	2161.1	2155.2	2156.4
17.5°	2180.0	2176.4	2171.7	2167.0	2157.6	2152.9	2148.1	2141.1	2138.7	2131.6	2129.3
20°	2155.2	2152.9	2147.0	2138.7	2132.8	2122.2	2117.5	2110.4	2104.5	2097.4	2093.9
22.5°	2123.4	2121.0	2113.9	2105.7	2096.3	2091.6	2086.8	2073.9	2068.0	2060.9	2059.7
25°	2083.3	2079.8	2072.7	2063.3	2058.5	2045.6	2040.8	2031.4	2029.1	2022.0	2020.8
27.5°	2022.0	2017.3	2009.0	1997.2	1989.0	1980.7	1976.0	1968.9	1966.6	1959.5	1958.3
30°	1930.0	1924.1	1907.6	1902.9	1888.8	1880.5	1880.5	1871.1	1872.3	1867.6	1867.6
32.5°	1785.0	1775.6	1762.6	1753.2	1743.7	1739.0	1739.0	1735.5	1737.9	1737.9	1740.2
35°	1592.8	1579.9	1572.8	1566.9	1566.9	1571.6	1585.8	1589.3	1596.4	1602.3	1607.0
37.5°	1346.4	1345.3	1353.5	1360.6	1378.3	1398.3	1423.1	1444.3	1464.3	1478.5	1492.6
40°	1080.0	1109.4	1133.0	1166.0	1193.1	1232.1	1276.9	1313.4	1347.6	1372.4	1398.3
42.5°	843.0	880.7	930.2	978.6	1026.9	1080.0	1138.9	1189.6	1234.4	1268.6	1295.7
45°	656.7	708.6	768.7	830.0	892.5	958.5	1019.8	1071.7	1118.9	1154.2	1181.4
47.5°	529.4	586.0	654.3	721.6	792.3	861.8	930.2	975.0	1013.9	1042.2	1067.0
50°	437.4	497.5	569.5	646.1	716.8	786.4	845.3	889.0	920.8	945.6	960.9
52.5°	365.5	429.1	505.8	582.4	653.2	716.8	769.9	802.9	828.8	846.5	860.7
55°	301.8	363.1	435.1	507.0	576.5	636.7	680.3	705.1	725.1	735.7	743.9
57.5°	246.4	303.0	369.0	435.1	495.2	544.7	578.9	603.7	613.1	621.3	620.2
60°	193.4	246.4	306.5	363.1	415.0	455.1	479.9	494.0	501.1	504.6	502.2
62.5°	152.1	200.4	246.4	295.9	333.7	367.8	391.4	391.4	395.0	396.1	399.7
65°	113.2	149.7	189.8	226.4	257.0	279.4	292.4	295.9	300.7	299.5	297.1
67.5°	83.7	110.8	140.3	167.4	188.6	202.8	212.2	220.5	219.3	216.9	215.8
70°	57.8	75.5	101.4	117.9	133.2	147.4	149.7	150.9	152.1	153.3	150.9
72.5°	40.1	53.1	67.2	81.4	90.8	96.7	102.6	103.7	103.7	103.7	102.6
75°	20.0	27.1	40.1	46.0	54.2	56.6	61.3	61.3	64.9	60.1	58.9
77.5°	17.7	21.2	28.3	33.0	36.6	40.1	41.3	44.8	43.6	41.3	42.4
80°	10.6	13.0	17.7	20.0	24.8	25.9	27.1	28.3	27.1	28.3	28.3
82.5°	8.3	9.4	11.8	11.8	15.3	15.3	16.5	16.5	17.7	17.7	17.7
85°	4.7	8.3	7.1	14.1	9.4	9.4	11.8	14.1	11.8	11.8	14.1
87.5°	4.7	4.7	3.5	4.7	4.7	4.7	5.9	7.1	7.1	8.3	7.1
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: P245026

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2196.5	2196.5	2196.5	2196.5
2.5°	2200.0	2202.4	2198.8	2197.7
5°	2203.5	2203.5	2201.2	2201.2
7.5°	2203.5	2203.5	2200.0	2197.7
10°	2194.1	2194.1	2190.6	2188.2
12.5°	2176.4	2176.4	2175.2	2171.7
15°	2154.0	2154.0	2149.3	2145.8
17.5°	2123.4	2125.7	2119.9	2119.9
20°	2090.4	2089.2	2084.5	2082.1
22.5°	2056.2	2053.8	2052.6	2045.6
25°	2019.6	2017.3	2013.7	2010.2
27.5°	1957.2	1956.0	1952.4	1947.7
30°	1861.6	1860.5	1855.8	1855.8
32.5°	1737.9	1736.7	1732.0	1733.1
35°	1609.3	1614.1	1611.7	1607.0
37.5°	1502.0	1505.6	1508.0	1505.6
40°	1412.4	1423.1	1424.2	1426.6
42.5°	1317.0	1331.1	1335.8	1338.2
45°	1202.6	1215.6	1226.2	1223.8
47.5°	1085.9	1095.3	1104.7	1097.6
50°	973.9	979.7	983.3	983.3
52.5°	867.8	867.8	866.6	867.8
55°	746.3	746.3	741.6	743.9
57.5°	619.0	621.3	617.8	611.9
60°	501.1	495.2	492.8	489.3
62.5°	390.3	390.3	382.0	392.6
65°	292.4	288.9	285.3	284.1
67.5°	212.2	211.1	207.5	206.3
70°	149.7	145.0	143.8	141.5
72.5°	100.2	100.2	97.9	97.9
75°	61.3	55.4	54.2	55.4
77.5°	42.4	41.3	41.3	40.1
80°	28.3	27.1	29.5	25.9
82.5°	17.7	18.9	17.7	18.9
85°	11.8	14.1	13.0	13.0
87.5°	7.1	7.1	7.1	7.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)