

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: P245506

Luminaire Tested: **LSR8B40D010 EC8B40940 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245506
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40940 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4004.0 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

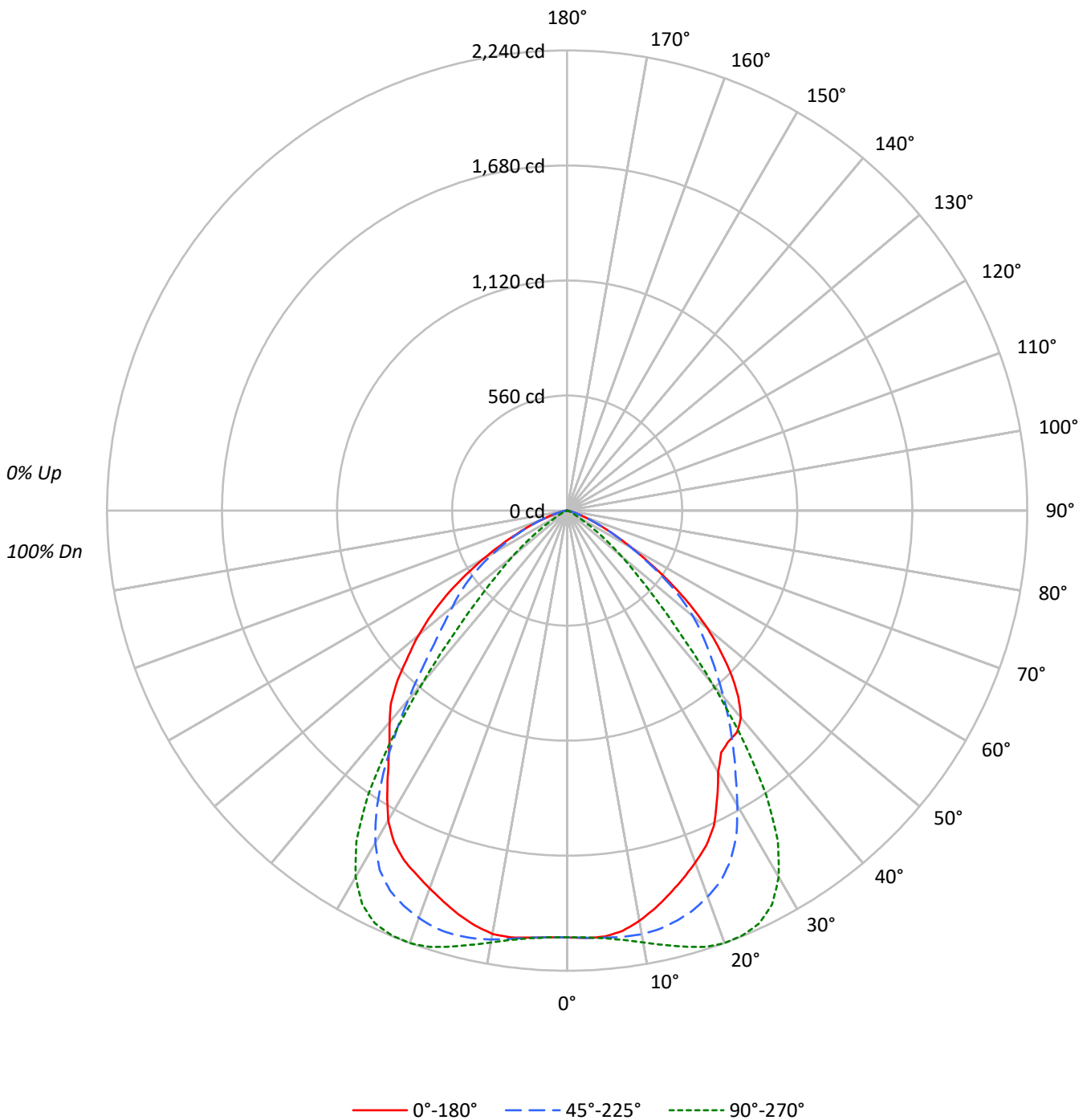
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	64050	64050	64050
5°	64434	64672	64604
10°	63485	66835	65524
15°	61629	70147	65007
20°	59842	73516	64220
25°	57545	75401	63921
30°	52367	73332	62027
35°	51588	63543	57069
40°	52990	44070	54101
45°	49331	26636	50870
50°	42787	16450	45329
55°	32838	8596	38466
60°	22369	3466	29035
65°	13914	1773	20029
70°	7555	1091	12226
75°	3944	524	7220
80°	1758	586	3907
85°	1168	389	3503



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.8	5.0
10°-20°	591.8	14.8
20°-30°	902.8	22.5
30°-40°	942.1	23.5
40°-50°	707.6	17.7
50°-60°	435.4	10.9
60°-70°	177.2	4.4
70°-80°	41.7	1.0
80°-90°	5.7	0.1
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°	1694.3	42.3
0°-40°	2636.3	65.8
0°-60°	3779.3	94.4
0°-90°	4004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4004.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2077	2077	2077	2077	2077	
5°	2082	2087	2089	2087	2087	197
15°	1930	2066	2197	2137	2036	544
25°	1691	1881	2216	2041	1879	769
35°	1370	1409	1688	1560	1516	865
45°	1131	979	611	912	1166	863
55°	611	580	160	580	716	549
65°	191	193	24	259	274	199
75°	33	33	4	58	61	40
85°	3	3	1	8	10	5
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°	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1
2.5°	2082.7	2079.3	2082.7	2082.7	2083.8	2081.6	2082.7	2083.8	2081.6	2081.6	2081.6
5°	2081.6	2079.3	2081.6	2080.5	2082.7	2082.7	2084.9	2084.9	2087.1	2087.1	2090.4
7.5°	2063.9	2059.5	2063.9	2067.2	2069.4	2073.8	2079.3	2083.8	2088.2	2092.6	2098.1
10°	2027.5	2027.5	2030.8	2037.5	2044.1	2051.8	2061.7	2072.7	2083.8	2093.7	2103.6
12.5°	1982.3	1979.0	1985.6	1994.5	2004.4	2016.5	2031.9	2048.5	2066.1	2086.0	2101.4
15°	1930.5	1927.2	1934.9	1943.7	1955.9	1973.5	1992.3	2014.3	2039.7	2066.1	2091.5
17.5°	1877.6	1876.5	1884.2	1896.3	1906.3	1925.0	1949.3	1975.7	2004.4	2039.7	2072.7
20°	1823.6	1822.5	1830.2	1840.1	1853.3	1871.0	1895.2	1926.1	1960.3	2000.0	2038.6
22.5°	1767.3	1768.4	1775.0	1786.1	1797.1	1815.8	1841.2	1872.1	1909.6	1952.6	1995.6
25°	1691.3	1685.8	1694.6	1705.6	1724.3	1739.8	1764.0	1797.1	1835.7	1880.9	1931.6
27.5°	1581.0	1579.9	1587.6	1597.5	1614.1	1632.8	1659.3	1693.5	1734.3	1783.9	1833.5
30°	1470.7	1473.0	1476.3	1486.2	1497.2	1516.0	1542.4	1571.1	1609.7	1657.1	1710.0
32.5°	1395.8	1395.8	1400.2	1406.8	1414.5	1424.5	1443.2	1464.1	1493.9	1527.0	1565.6
35°	1370.4	1366.0	1370.4	1371.5	1372.6	1374.8	1378.1	1384.8	1394.7	1409.0	1423.4
37.5°	1359.4	1356.1	1356.1	1351.7	1346.2	1339.6	1330.7	1320.8	1309.8	1295.5	1284.4
40°	1316.4	1314.2	1312.0	1307.6	1295.5	1282.2	1267.9	1244.7	1219.4	1184.1	1148.8
42.5°	1233.7	1231.5	1230.4	1221.6	1210.6	1195.1	1178.6	1154.3	1122.4	1077.2	1026.4
45°	1131.2	1126.8	1123.5	1115.8	1108.0	1094.8	1079.4	1057.3	1025.3	979.0	918.4
47.5°	1012.1	1009.9	1008.8	1005.5	997.8	990.0	980.1	962.5	933.8	889.7	826.9
50°	891.9	887.5	889.7	888.6	885.3	879.8	873.2	861.1	839.0	799.3	742.0
52.5°	754.1	754.1	753.0	756.3	757.4	756.3	757.4	744.2	725.5	695.7	647.2
55°	610.8	610.8	614.1	618.5	622.9	624.0	622.9	617.4	604.2	579.9	536.9
57.5°	476.3	474.1	480.7	487.3	491.7	496.1	492.8	488.4	480.7	460.8	427.8
60°	362.7	362.7	367.1	371.6	375.9	380.4	379.3	378.2	371.6	358.3	331.9
62.5°	266.8	267.9	267.9	271.2	275.6	280.0	283.3	280.0	276.7	267.9	250.3
65°	190.7	189.6	190.7	194.0	197.4	201.8	204.0	202.9	199.5	192.9	179.7
67.5°	127.9	126.8	131.2	132.3	134.5	138.9	137.8	138.9	137.8	132.3	121.3
70°	83.8	81.6	83.8	82.7	86.0	87.1	89.3	90.4	89.3	86.0	82.7
72.5°	51.8	50.7	51.8	52.9	54.0	55.1	57.3	57.3	56.2	54.0	49.6
75°	33.1	29.8	30.9	28.7	30.9	30.9	33.1	34.2	33.1	33.1	30.9
77.5°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	21.0	22.0	19.9	18.7
80°	9.9	9.9	11.0	11.0	11.0	12.1	11.0	11.0	11.0	12.1	8.8
82.5°	7.7	6.6	6.6	6.6	7.7	6.6	6.6	6.6	6.6	6.6	6.6
85°	3.3	4.4	3.3	2.2	3.3	3.3	4.4	3.3	3.3	3.3	4.4
87.5°	1.1	1.1	0.0	0.0	0.0	1.1	0.0	1.1	1.1	2.2	0.0
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°	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1
2.5°	2082.7	2080.5	2080.5	2079.3	2081.6	2079.3	2080.5	2079.3	2079.3	2081.6	2079.3
5°	2090.4	2091.5	2089.3	2088.2	2091.5	2091.5	2091.5	2089.3	2089.3	2090.4	2089.3
7.5°	2101.4	2103.6	2104.7	2105.8	2108.0	2109.1	2109.1	2108.0	2106.9	2110.2	2105.8
10°	2113.5	2116.8	2123.5	2126.8	2132.3	2132.3	2134.5	2134.5	2132.3	2134.5	2133.4
12.5°	2109.1	2129.0	2140.0	2147.7	2155.4	2162.0	2164.2	2165.3	2164.2	2168.7	2164.2
15°	2116.8	2133.4	2151.0	2164.2	2178.6	2186.3	2188.5	2197.3	2199.5	2200.6	2194.0
17.5°	2104.7	2134.5	2153.2	2173.1	2194.0	2208.3	2221.6	2227.1	2228.2	2230.4	2221.6
20°	2077.1	2110.2	2138.9	2167.6	2191.8	2213.9	2224.9	2240.3	2235.9	2244.7	2232.6
22.5°	2039.7	2077.1	2113.5	2151.0	2176.4	2202.8	2226.0	2237.0	2242.5	2242.5	2229.3
25°	1980.1	2024.2	2063.9	2102.5	2141.1	2173.1	2199.5	2216.1	2219.4	2218.3	2202.8
27.5°	1887.5	1934.9	1981.2	2025.3	2072.7	2110.2	2141.1	2160.9	2166.5	2166.5	2149.9
30°	1759.6	1810.3	1855.5	1908.4	1957.0	1998.9	2041.9	2059.5	2069.4	2069.4	2050.7
32.5°	1607.5	1650.5	1692.4	1744.2	1797.1	1844.5	1885.3	1909.6	1921.7	1920.6	1904.1
35°	1442.1	1463.0	1495.0	1533.6	1581.0	1625.1	1664.8	1688.0	1708.9	1707.8	1692.4
37.5°	1276.7	1271.2	1274.5	1288.8	1318.6	1349.5	1380.3	1402.4	1420.0	1427.8	1424.5
40°	1114.7	1086.0	1058.4	1048.5	1050.7	1061.7	1078.3	1094.8	1114.7	1124.6	1129.0
42.5°	969.1	920.6	872.1	835.7	814.8	808.1	815.9	821.4	833.5	847.8	862.2
45°	852.3	787.2	723.2	667.0	631.7	610.8	606.4	610.8	617.4	631.7	650.5
47.5°	756.3	680.2	608.6	545.7	493.9	466.4	458.7	456.4	463.1	476.3	501.6
50°	671.4	595.4	516.0	443.2	389.2	358.3	347.3	342.9	350.6	360.5	383.7
52.5°	578.8	503.8	422.3	351.7	295.5	263.5	251.4	244.8	249.2	262.4	285.5
55°	478.5	409.0	335.2	262.4	208.4	178.6	164.3	159.9	164.3	178.6	201.8
57.5°	378.2	319.7	258.0	189.6	141.1	111.4	97.0	92.6	104.8	110.3	134.5
60°	295.5	248.1	195.2	138.9	97.0	73.9	59.5	56.2	61.7	71.7	91.5
62.5°	221.6	191.8	149.9	99.2	71.7	47.4	39.7	36.4	39.7	47.4	62.9
65°	161.0	137.8	104.8	72.8	48.5	35.3	26.5	24.3	27.6	33.1	46.3
67.5°	110.3	92.6	72.8	50.7	33.1	22.0	18.7	18.7	19.9	24.3	34.2
70°	71.7	60.6	46.3	33.1	22.0	16.5	14.3	12.1	14.3	17.6	23.1
72.5°	45.2	38.6	29.8	23.1	16.5	12.1	9.9	8.8	11.0	13.2	17.6
75°	27.6	21.0	15.4	12.1	8.8	8.8	8.8	4.4	5.5	8.8	11.0
77.5°	16.5	14.3	12.1	9.9	7.7	4.4	4.4	4.4	5.5	6.6	9.9
80°	8.8	7.7	5.5	5.5	4.4	3.3	4.4	3.3	2.2	5.5	6.6
82.5°	5.5	4.4	4.4	4.4	5.5	2.2	3.3	2.2	3.3	4.4	3.3
85°	3.3	3.3	3.3	2.2	5.5	2.2	2.2	1.1	1.1	2.2	2.2
87.5°	0.0	1.1	1.1	0.0	1.1	0.0	1.1	1.1	1.1	1.1	1.1
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°	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1	2077.1
2.5°	2080.5	2079.3	2080.5	2079.3	2079.3	2079.3	2080.5	2080.5	2079.3	2079.3	2081.6
5°	2089.3	2089.3	2089.3	2088.2	2087.1	2087.1	2089.3	2089.3	2086.0	2089.3	2089.3
7.5°	2108.0	2104.7	2108.0	2103.6	2101.4	2102.5	2103.6	2101.4	2099.2	2100.3	2100.3
10°	2132.3	2129.0	2129.0	2125.7	2122.3	2120.1	2117.9	2112.4	2106.9	2105.8	2101.4
12.5°	2160.9	2155.4	2152.1	2145.5	2140.0	2132.3	2125.7	2116.8	2105.8	2098.1	2090.4
15°	2189.6	2180.8	2173.1	2162.0	2149.9	2136.7	2122.3	2108.0	2090.4	2074.9	2061.7
17.5°	2212.7	2200.6	2186.3	2168.7	2151.0	2131.2	2110.2	2089.3	2063.9	2044.1	2028.6
20°	2220.5	2202.8	2184.1	2160.9	2137.8	2110.2	2083.8	2056.2	2027.5	2006.6	1988.9
22.5°	2210.6	2189.6	2166.5	2142.2	2111.3	2081.6	2050.7	2018.7	1993.3	1964.7	1948.2
25°	2183.0	2157.6	2132.3	2103.6	2073.8	2040.8	2007.7	1974.6	1943.7	1928.3	1907.4
27.5°	2126.8	2099.2	2071.6	2041.9	2007.7	1974.6	1940.4	1908.4	1882.0	1861.0	1848.9
30°	2027.5	1995.6	1963.6	1931.6	1901.8	1867.7	1835.7	1809.2	1782.8	1766.2	1754.1
32.5°	1875.4	1846.7	1814.8	1783.9	1756.3	1727.6	1701.2	1678.0	1659.3	1648.3	1639.4
35°	1670.3	1641.6	1617.4	1595.4	1572.2	1560.1	1543.5	1530.3	1522.6	1518.2	1517.1
37.5°	1412.3	1395.8	1388.1	1383.7	1379.2	1376.0	1378.1	1383.7	1388.1	1395.8	1404.6
40°	1136.7	1151.0	1155.4	1170.9	1185.2	1203.9	1224.9	1249.2	1269.0	1294.3	1312.0
42.5°	885.3	911.8	942.7	975.7	1011.0	1045.2	1087.1	1125.7	1160.9	1192.9	1220.5
45°	680.2	721.0	767.4	814.8	862.2	911.8	962.5	1009.9	1051.8	1086.0	1114.7
47.5°	530.3	575.5	635.1	693.5	750.8	809.3	865.5	915.1	950.4	983.4	1008.8
50°	420.1	471.9	536.9	604.2	667.0	728.8	788.3	834.6	869.9	896.4	915.1
52.5°	325.2	387.0	453.1	523.7	591.0	658.2	713.3	756.3	785.0	808.1	822.5
55°	242.5	303.2	373.8	446.5	514.9	579.9	631.7	669.2	694.6	707.8	715.5
57.5°	175.3	230.4	301.0	373.8	435.5	497.2	539.1	573.3	587.6	595.4	598.7
60°	127.9	178.6	241.4	304.3	362.7	412.3	448.7	471.9	482.9	487.3	486.2
62.5°	93.7	137.8	191.8	244.8	292.2	332.9	361.6	377.1	382.6	384.8	381.5
65°	71.7	105.8	152.1	192.9	229.3	259.1	280.0	290.0	293.3	292.2	290.0
67.5°	52.9	79.4	113.6	144.4	170.9	194.0	205.1	213.9	216.1	212.8	209.5
70°	37.5	58.4	82.7	103.6	123.5	136.7	148.8	149.9	149.9	148.8	146.6
72.5°	26.5	40.8	56.2	70.6	82.7	92.6	97.0	100.3	99.2	98.1	95.9
75°	17.6	25.4	40.8	44.1	55.1	58.4	62.9	62.9	63.9	60.6	60.6
77.5°	11.0	17.6	24.3	28.7	33.1	37.5	39.7	39.7	40.8	39.7	39.7
80°	6.6	11.0	13.2	19.9	19.9	23.1	24.3	25.4	23.1	26.5	23.1
82.5°	4.4	6.6	9.9	9.9	12.1	14.3	14.3	15.4	15.4	14.3	14.3
85°	3.3	4.4	5.5	6.6	6.6	7.7	6.6	6.6	7.7	8.8	7.7
87.5°	1.1	2.2	1.1	2.2	2.2	4.4	3.3	3.3	3.3	4.4	4.4
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: P245506

CATALOG NUMBER: LSR8B40D010 EC8B40940 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2077.1	2077.1	2077.1	2077.1
2.5°	2079.3	2080.5	2079.3	2079.3
5°	2089.3	2088.2	2089.3	2087.1
7.5°	2097.0	2097.0	2095.9	2095.9
10°	2097.0	2092.6	2092.6	2092.6
12.5°	2080.5	2074.9	2071.6	2069.4
15°	2051.8	2041.9	2037.5	2036.3
17.5°	2014.3	2005.5	2000.0	1996.7
20°	1971.3	1962.5	1955.9	1957.0
22.5°	1933.8	1923.9	1919.5	1917.3
25°	1896.3	1884.2	1880.9	1878.7
27.5°	1835.7	1829.1	1825.8	1822.5
30°	1743.1	1739.8	1734.3	1742.0
32.5°	1636.1	1630.6	1626.2	1629.5
35°	1518.2	1514.9	1518.2	1516.0
37.5°	1410.1	1413.4	1417.8	1420.0
40°	1325.2	1337.3	1341.8	1344.0
42.5°	1240.3	1254.7	1263.5	1269.0
45°	1135.6	1149.9	1159.8	1166.5
47.5°	1027.5	1039.7	1049.6	1048.5
50°	929.4	936.0	940.4	944.9
52.5°	830.2	830.2	831.3	831.3
55°	717.7	715.5	714.4	715.5
57.5°	594.2	592.1	591.0	587.6
60°	481.8	475.2	470.8	470.8
62.5°	377.1	369.3	366.0	364.9
65°	283.3	282.2	275.6	274.5
67.5°	205.1	200.7	196.3	197.4
70°	144.4	137.8	137.8	135.6
72.5°	93.7	90.4	89.3	89.3
75°	58.4	58.4	56.2	60.6
77.5°	38.6	38.6	37.5	38.6
80°	23.1	23.1	23.1	22.0
82.5°	14.3	15.4	14.3	14.3
85°	7.7	8.8	6.6	9.9
87.5°	4.4	5.5	4.4	5.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)