

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: P246046

Luminaire Tested: **LSR8B40D010 EC8B40835 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246046
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 EC8B40835 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4361.0 lumens
Efficiency: N/A
Efficacy: 106.6 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

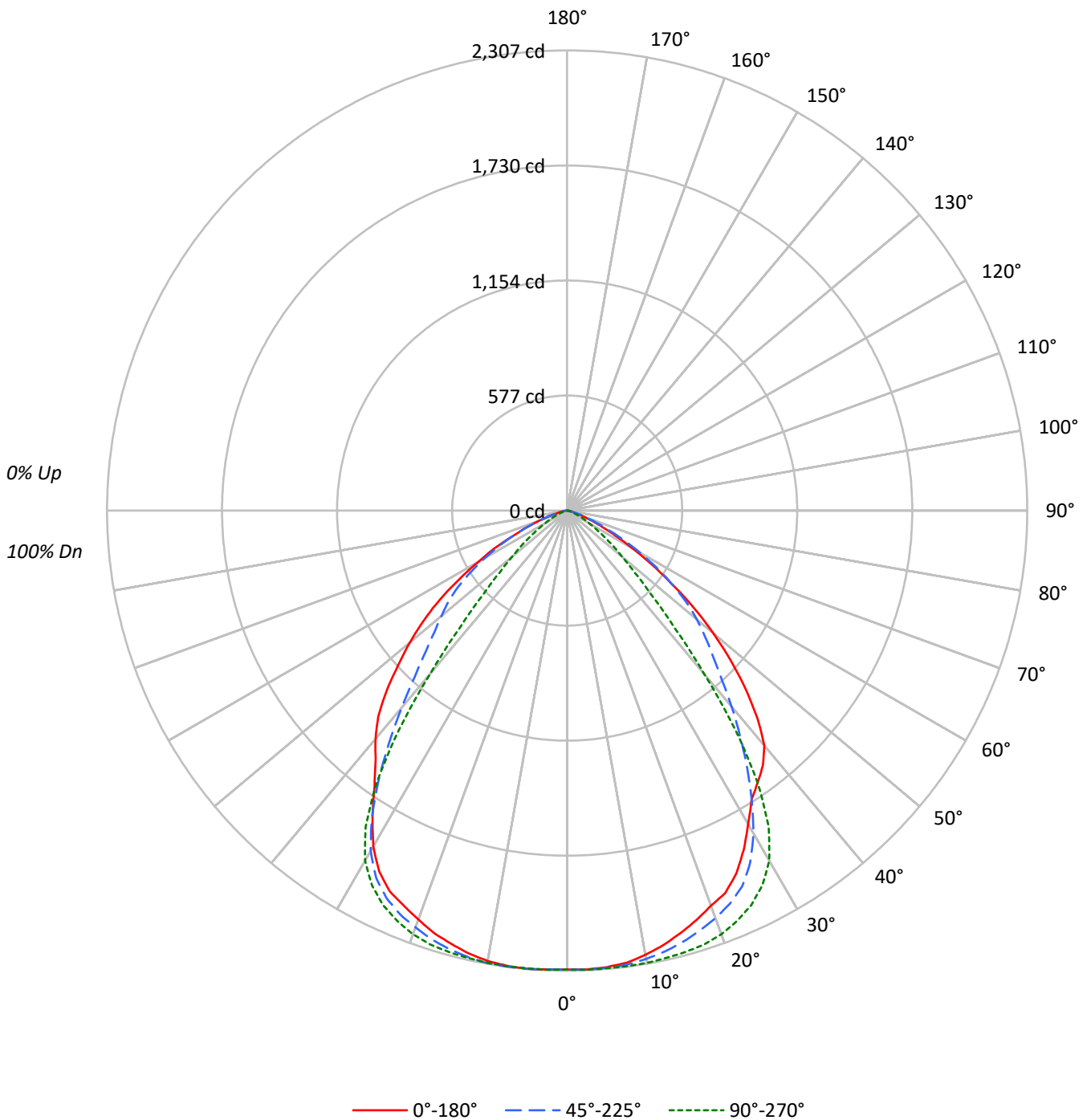
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	70951	70951	70951
5°	71108	71300	71377
10°	70809	72087	71777
15°	70026	73141	71762
20°	69185	74169	71577
25°	68286	74254	71648
30°	64601	72168	69219
35°	62674	62719	63370
40°	61898	43152	60160
45°	55152	25908	55907
50°	45862	17241	49417
55°	34397	11887	41896
60°	23306	7919	31613
65°	14060	5137	21714
70°	7799	2786	13362
75°	3527	1180	6922
80°	3072	1314	4830
85°	3503	1734	4812



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.6	5.0
10°-20°	637.7	14.6
20°-30°	968.0	22.2
30°-40°	1016.6	23.3
40°-50°	762.2	17.5
50°-60°	489.1	11.2
60°-70°	209.2	4.8
70°-80°	49.4	1.1
80°-90°	9.2	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°	1825.3	41.9
0°-40°	2841.9	65.2
0°-60°	4093.2	93.9
0°-90°	4361.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4361.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2301	2301	2301	2301	2301	
5°	2297	2301	2303	2307	2306	218
15°	2194	2239	2291	2276	2248	619
25°	2007	2077	2182	2143	2106	917
35°	1665	1572	1666	1646	1683	1045
45°	1265	1034	594	1004	1282	969
55°	640	640	221	667	779	580
65°	193	227	70	293	298	206
75°	30	35	10	59	58	43
85°	10	6	5	10	14	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°	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9
2.5°	2302.2	2304.7	2303.4	2303.4	2302.2	2303.4	2303.4	2305.9	2305.9	2303.4	2302.2
5°	2297.2	2299.7	2299.7	2297.2	2297.2	2303.4	2299.7	2302.2	2302.2	2300.9	2300.9
7.5°	2286.1	2286.1	2291.1	2287.4	2287.4	2291.1	2289.8	2292.3	2294.8	2296.0	2296.0
10°	2261.4	2263.9	2265.1	2265.1	2266.4	2270.1	2272.5	2277.5	2279.9	2282.4	2283.7
12.5°	2230.6	2234.3	2235.5	2234.3	2238.0	2242.9	2249.1	2255.3	2259.0	2263.9	2267.6
15°	2193.5	2193.5	2196.0	2199.7	2202.2	2209.6	2215.7	2223.1	2233.0	2239.2	2245.4
17.5°	2152.7	2155.2	2158.9	2158.9	2163.9	2176.2	2179.9	2191.0	2202.2	2208.3	2220.7
20°	2108.3	2110.7	2114.5	2116.9	2123.1	2133.0	2140.4	2150.3	2162.6	2173.8	2186.1
22.5°	2073.7	2068.8	2071.2	2073.7	2079.9	2088.5	2097.2	2109.5	2121.9	2133.0	2145.3
25°	2007.0	2008.2	2012.0	2014.4	2021.8	2029.2	2039.1	2053.9	2065.0	2077.4	2091.0
27.5°	1916.8	1918.1	1924.3	1924.3	1930.4	1942.8	1948.9	1961.3	1976.1	1988.5	2004.5
30°	1814.3	1816.8	1816.8	1821.7	1825.4	1831.6	1837.8	1850.2	1857.6	1868.7	1890.9
32.5°	1720.5	1722.9	1721.7	1720.5	1716.8	1715.5	1714.3	1716.8	1719.2	1722.9	1731.6
35°	1664.9	1658.7	1653.8	1645.1	1635.3	1622.9	1611.8	1597.0	1583.4	1572.2	1559.9
37.5°	1611.8	1610.5	1603.1	1590.8	1571.0	1548.8	1522.9	1490.7	1458.6	1424.0	1390.7
40°	1537.7	1534.0	1527.8	1510.5	1488.3	1461.1	1426.5	1387.0	1335.1	1282.0	1227.7
42.5°	1411.7	1412.9	1405.5	1391.9	1370.9	1345.0	1309.2	1266.0	1210.4	1147.4	1077.0
45°	1264.7	1264.7	1262.2	1251.1	1236.3	1215.3	1188.1	1152.3	1098.0	1033.7	958.4
47.5°	1111.6	1112.8	1109.1	1106.6	1100.4	1086.9	1067.1	1039.9	1001.7	939.9	864.5
50°	956.0	956.0	962.1	960.9	960.9	956.0	947.3	931.2	897.9	848.5	778.1
52.5°	800.3	802.8	806.5	811.4	817.6	827.5	817.6	810.2	789.2	750.9	690.4
55°	639.8	642.2	648.4	657.1	664.5	674.4	676.8	676.8	665.7	639.8	594.1
57.5°	502.7	499.0	503.9	511.3	521.2	531.1	538.5	547.1	545.9	528.6	491.6
60°	377.9	379.2	382.9	390.3	397.7	406.3	416.2	423.6	427.3	418.7	395.2
62.5°	275.4	275.4	280.4	287.8	291.5	303.8	310.0	313.7	317.4	316.2	301.4
65°	192.7	195.1	197.6	201.3	205.0	212.4	216.1	223.5	226.0	227.3	216.1
67.5°	135.9	132.2	134.6	137.1	140.8	145.8	153.2	153.2	156.8	156.8	149.4
70°	86.5	86.5	87.7	91.4	93.9	95.1	97.6	100.0	103.7	102.5	102.5
72.5°	58.1	56.8	58.1	59.3	60.5	64.2	64.2	65.5	67.9	69.2	64.2
75°	29.6	30.9	33.3	32.1	35.8	33.3	34.6	38.3	37.1	34.6	34.6
77.5°	24.7	24.7	24.7	23.5	25.9	25.9	24.7	27.2	25.9	25.9	24.7
80°	17.3	18.5	17.3	16.0	17.3	16.0	16.0	16.0	16.0	16.0	14.8
82.5°	13.6	11.1	12.4	11.1	12.4	12.4	11.1	9.9	9.9	11.1	9.9
85°	9.9	7.4	8.6	8.6	7.4	7.4	7.4	7.4	7.4	6.2	6.2
87.5°	6.2	3.7	3.7	3.7	4.9	4.9	4.9	3.7	4.9	4.9	2.5
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9
2.5°	2304.7	2303.4	2305.9	2304.7	2304.7	2303.4	2304.7	2303.4	2305.9	2300.9	2302.2
5°	2304.7	2302.2	2303.4	2304.7	2305.9	2303.4	2303.4	2303.4	2305.9	2303.4	2304.7
7.5°	2299.7	2298.5	2302.2	2304.7	2303.4	2302.2	2304.7	2303.4	2305.9	2304.7	2307.1
10°	2289.8	2291.1	2293.5	2297.2	2298.5	2299.7	2302.2	2302.2	2305.9	2300.9	2303.4
12.5°	2275.0	2279.9	2286.1	2288.6	2293.5	2293.5	2296.0	2297.2	2299.7	2298.5	2302.2
15°	2256.5	2262.7	2270.1	2276.3	2282.4	2286.1	2289.8	2291.1	2294.8	2291.1	2292.3
17.5°	2234.3	2241.7	2252.8	2260.2	2270.1	2273.8	2278.7	2281.2	2284.9	2282.4	2283.7
20°	2203.4	2212.0	2224.4	2235.5	2241.7	2250.3	2256.5	2260.2	2262.7	2260.2	2261.4
22.5°	2160.2	2172.5	2188.6	2197.2	2209.6	2217.0	2218.2	2226.8	2233.0	2226.8	2229.3
25°	2109.5	2121.9	2134.2	2152.7	2163.9	2172.5	2181.2	2182.4	2188.6	2187.3	2186.1
27.5°	2025.5	2041.6	2062.6	2077.4	2092.2	2105.8	2115.7	2118.1	2124.3	2121.9	2123.1
30°	1910.7	1928.0	1947.7	1971.2	1992.2	2005.8	2018.1	2026.8	2032.9	2029.2	2028.0
32.5°	1747.6	1764.9	1785.9	1809.4	1834.1	1853.8	1868.7	1879.8	1887.2	1884.7	1878.6
35°	1561.2	1566.1	1579.7	1598.2	1619.2	1640.2	1653.8	1666.1	1674.8	1677.2	1677.2
37.5°	1369.7	1353.7	1343.8	1343.8	1356.1	1364.8	1377.1	1384.5	1398.1	1403.0	1406.8
40°	1184.4	1147.4	1112.8	1086.9	1069.6	1068.4	1068.4	1072.0	1084.4	1100.4	1115.3
42.5°	1018.9	959.6	906.6	858.4	823.8	804.0	795.4	796.6	806.5	821.3	846.0
45°	886.8	812.7	746.0	687.9	641.0	610.1	595.3	594.1	601.5	618.8	646.0
47.5°	784.3	705.2	629.9	563.2	512.6	479.2	461.9	457.0	461.9	478.0	510.1
50°	699.1	617.6	539.7	470.6	416.2	381.7	365.6	359.4	365.6	379.2	411.3
52.5°	620.0	536.0	463.2	396.5	338.4	308.8	291.5	287.8	291.5	307.5	333.5
55°	528.6	457.0	385.3	318.6	268.0	238.4	224.8	221.1	224.8	239.6	266.8
57.5°	438.5	376.7	313.7	253.2	210.0	184.0	171.7	166.7	175.4	185.3	217.4
60°	354.5	305.1	251.9	198.8	163.0	139.6	129.7	128.4	130.9	143.3	165.5
62.5°	277.9	237.1	195.1	151.9	122.3	112.4	100.0	98.8	101.3	108.7	126.0
65°	200.1	174.2	142.0	111.2	87.7	74.1	69.2	70.4	72.9	77.8	93.9
67.5°	139.6	121.0	98.8	77.8	60.5	54.3	49.4	48.2	49.4	58.1	66.7
70°	93.9	82.7	66.7	59.3	42.0	33.3	34.6	30.9	35.8	35.8	43.2
72.5°	61.7	54.3	44.5	34.6	29.6	23.5	23.5	22.2	24.7	25.9	32.1
75°	32.1	24.7	24.7	17.3	12.4	6.2	11.1	9.9	8.6	9.9	12.4
77.5°	22.2	18.5	17.3	13.6	12.4	9.9	9.9	9.9	9.9	11.1	12.4
80°	13.6	13.6	9.9	8.6	7.4	6.2	7.4	7.4	7.4	7.4	8.6
82.5°	8.6	7.4	7.4	6.2	6.2	4.9	4.9	4.9	4.9	4.9	7.4
85°	7.4	4.9	4.9	3.7	4.9	8.6	3.7	4.9	4.9	4.9	3.7
87.5°	2.5	3.7	3.7	3.7	2.5	1.2	2.5	3.7	3.7	6.2	4.9
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°	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9	2300.9
2.5°	2304.7	2305.9	2305.9	2304.7	2304.7	2302.2	2307.1	2303.4	2304.7	2309.6	2305.9
5°	2307.1	2308.4	2308.4	2307.1	2307.1	2307.1	2308.4	2308.4	2307.1	2305.9	2308.4
7.5°	2312.1	2310.8	2310.8	2308.4	2308.4	2305.9	2308.4	2304.7	2307.1	2304.7	2308.4
10°	2305.9	2307.1	2305.9	2304.7	2304.7	2303.4	2303.4	2299.7	2300.9	2297.2	2299.7
12.5°	2302.2	2300.9	2300.9	2298.5	2296.0	2293.5	2292.3	2288.6	2288.6	2279.9	2283.7
15°	2292.3	2293.5	2289.8	2284.9	2282.4	2276.3	2273.8	2268.8	2263.9	2257.7	2259.0
17.5°	2283.7	2279.9	2275.0	2270.1	2260.2	2255.3	2250.3	2242.9	2240.4	2233.0	2230.6
20°	2257.7	2255.3	2249.1	2240.4	2234.3	2223.1	2218.2	2210.8	2204.6	2197.2	2193.5
22.5°	2224.4	2221.9	2214.5	2205.8	2196.0	2191.0	2186.1	2172.5	2166.3	2158.9	2157.7
25°	2182.4	2178.7	2171.3	2161.4	2156.4	2142.9	2137.9	2128.0	2125.6	2118.1	2116.9
27.5°	2118.1	2113.2	2104.6	2092.2	2083.6	2074.9	2070.0	2062.6	2060.1	2052.7	2051.5
30°	2021.8	2015.6	1998.4	1993.4	1978.6	1969.9	1969.9	1960.1	1961.3	1956.4	1956.4
32.5°	1869.9	1860.0	1846.4	1836.6	1826.7	1821.7	1821.7	1818.0	1820.5	1820.5	1823.0
35°	1668.6	1655.0	1647.6	1641.4	1641.4	1646.3	1661.2	1664.9	1672.3	1678.5	1683.4
37.5°	1410.4	1409.2	1417.9	1425.3	1443.8	1464.8	1490.7	1513.0	1534.0	1548.8	1563.6
40°	1131.3	1162.2	1186.9	1221.5	1249.9	1290.7	1337.6	1375.9	1411.7	1437.6	1464.8
42.5°	883.1	922.6	974.5	1025.1	1075.8	1131.3	1193.1	1246.2	1293.1	1328.9	1357.3
45°	687.9	742.3	805.3	869.5	935.0	1004.1	1068.4	1122.7	1172.1	1209.1	1237.6
47.5°	554.5	613.8	685.5	755.9	830.0	902.8	974.5	1021.4	1062.2	1091.8	1117.8
50°	458.2	521.2	596.5	676.8	750.9	823.8	885.5	931.2	964.6	990.5	1006.6
52.5°	382.9	449.6	529.9	610.1	684.2	750.9	806.5	841.1	868.3	886.8	901.6
55°	316.2	380.4	455.8	531.1	604.0	666.9	712.6	738.6	759.6	770.7	779.3
57.5°	258.1	317.4	386.6	455.8	518.7	570.6	606.4	632.4	642.2	650.9	649.6
60°	202.6	258.1	321.1	380.4	434.8	476.7	502.7	517.5	524.9	528.6	526.1
62.5°	159.3	210.0	258.1	310.0	349.5	385.3	410.1	410.1	413.7	415.0	418.7
65°	118.6	156.8	198.8	237.1	269.2	292.7	306.3	310.0	315.0	313.7	311.2
67.5°	87.7	116.1	147.0	175.4	197.6	212.4	222.3	231.0	229.7	227.3	226.0
70°	60.5	79.1	106.2	123.5	139.6	154.4	156.8	158.1	159.3	160.6	158.1
72.5°	42.0	55.6	70.4	85.2	95.1	101.3	107.5	108.7	108.7	108.7	107.5
75°	21.0	28.4	42.0	48.2	56.8	59.3	64.2	64.2	67.9	63.0	61.7
77.5°	18.5	22.2	29.6	34.6	38.3	42.0	43.2	46.9	45.7	43.2	44.5
80°	11.1	13.6	18.5	21.0	25.9	27.2	28.4	29.6	28.4	29.6	29.6
82.5°	8.6	9.9	12.4	12.4	16.0	16.0	17.3	17.3	18.5	18.5	18.5
85°	4.9	8.6	7.4	14.8	9.9	9.9	12.4	14.8	12.4	12.4	14.8
87.5°	4.9	4.9	3.7	4.9	4.9	4.9	6.2	7.4	7.4	8.6	7.4
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: P246046

CATALOG NUMBER: LSR8B40D010 EC8B40835 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2300.9	2300.9	2300.9	2300.9
2.5°	2304.7	2307.1	2303.4	2302.2
5°	2308.4	2308.4	2305.9	2305.9
7.5°	2308.4	2308.4	2304.7	2302.2
10°	2298.5	2298.5	2294.8	2292.3
12.5°	2279.9	2279.9	2278.7	2275.0
15°	2256.5	2256.5	2251.5	2247.9
17.5°	2224.4	2226.8	2220.7	2220.7
20°	2189.8	2188.6	2183.6	2181.2
22.5°	2154.0	2151.5	2150.3	2142.9
25°	2115.7	2113.2	2109.5	2105.8
27.5°	2050.2	2049.0	2045.3	2040.4
30°	1950.2	1948.9	1944.0	1944.0
32.5°	1820.5	1819.3	1814.3	1815.6
35°	1685.9	1690.8	1688.4	1683.4
37.5°	1573.5	1577.2	1579.7	1577.2
40°	1479.6	1490.7	1492.0	1494.5
42.5°	1379.6	1394.4	1399.4	1401.8
45°	1259.8	1273.4	1284.5	1282.0
47.5°	1137.5	1147.4	1157.3	1149.9
50°	1020.2	1026.3	1030.1	1030.1
52.5°	909.0	909.0	907.8	909.0
55°	781.8	781.8	776.9	779.3
57.5°	648.4	650.9	647.2	641.0
60°	524.9	518.7	516.3	512.6
62.5°	408.8	408.8	400.2	411.3
65°	306.3	302.6	298.9	297.6
67.5°	222.3	221.1	217.4	216.1
70°	156.8	151.9	150.7	148.2
72.5°	105.0	105.0	102.5	102.5
75°	64.2	58.1	56.8	58.1
77.5°	44.5	43.2	43.2	42.0
80°	29.6	28.4	30.9	27.2
82.5°	18.5	19.8	18.5	19.8
85°	12.4	14.8	13.6	13.6
87.5°	7.4	7.4	7.4	7.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)