

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: P246052

Luminaire Tested: **LSR8B40D010 EC8B40840 8LBDW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246052  
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 EC8B40840 8LBDW0GPH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4332.0 lumens  
Efficiency: N/A  
Efficacy: 105.9 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

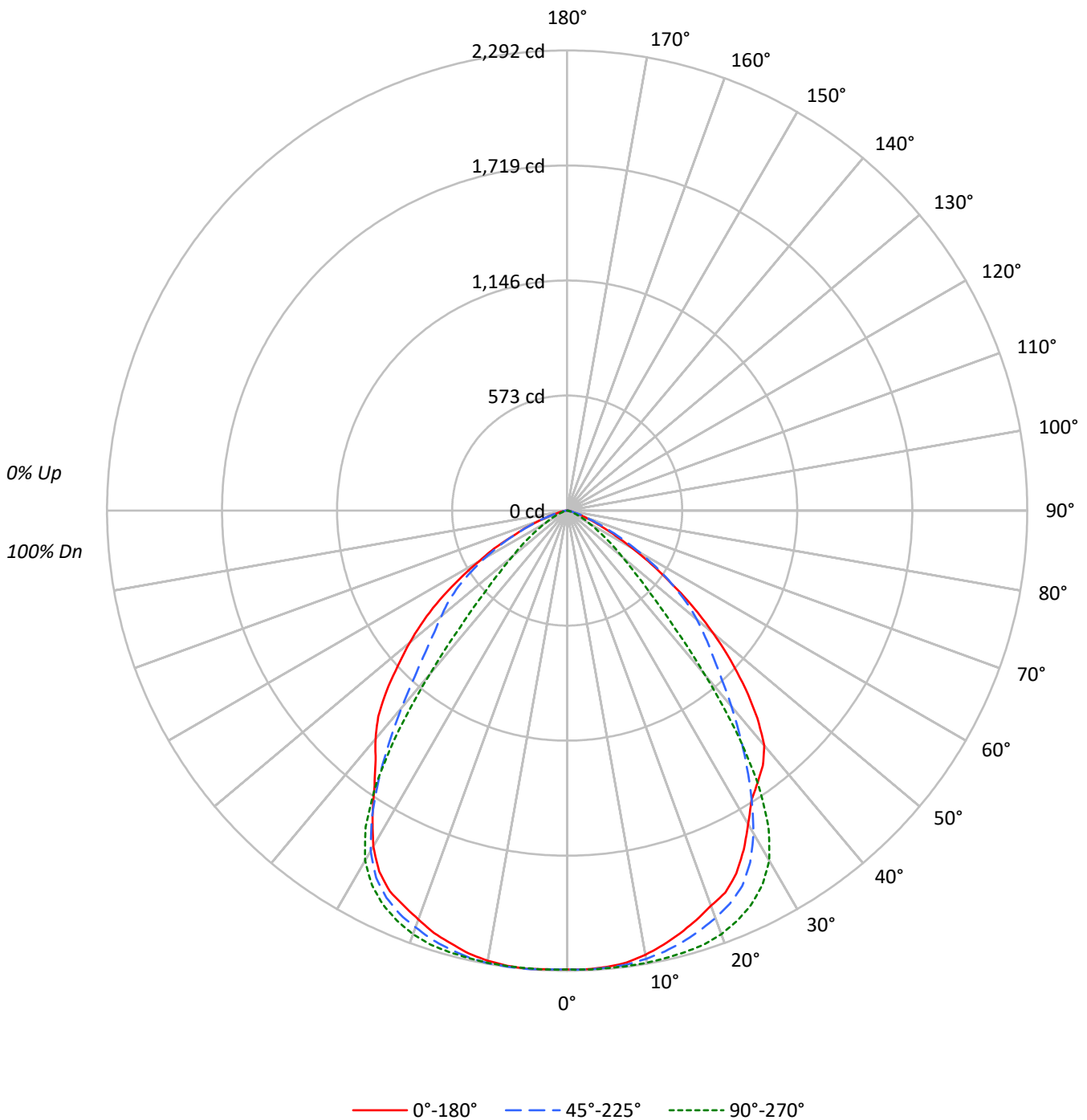
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	70479	70479	70479
5°	70637	70826	70903
10°	70339	71607	71301
15°	69559	72653	71283
20°	68725	73677	71101
25°	67830	73761	71172
30°	64174	71687	68760
35°	62256	62301	62949
40°	61484	42866	59757
45°	54786	25734	55536
50°	45555	17126	49086
55°	34165	11806	41617
60°	23152	7869	31404
65°	13965	5100	21576
70°	7745	2768	13271
75°	3503	1168	6875
80°	3054	1314	4795
85°	3467	1734	4776



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.1	5.0
10°-20°	633.5	14.6
20°-30°	961.5	22.2
30°-40°	1009.9	23.3
40°-50°	757.1	17.5
50°-60°	485.8	11.2
60°-70°	207.8	4.8
70°-80°	49.1	1.1
80°-90°	9.1	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°	1813.1	41.9
0°-40°	2823.0	65.2
0°-60°	4066.0	93.9
0°-90°	4332.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4332.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2286	2286	2286	2286	2286	
5°	2282	2286	2288	2292	2291	217
15°	2179	2224	2276	2261	2233	615
25°	1994	2064	2168	2129	2092	911
35°	1654	1562	1655	1635	1672	1038
45°	1256	1027	590	998	1274	962
55°	636	636	220	662	774	576
65°	191	226	70	291	296	204
75°	29	34	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°	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6
2.5°	2286.9	2289.3	2288.1	2288.1	2286.9	2288.1	2288.1	2290.6	2290.6	2288.1	2286.9
5°	2282.0	2284.4	2284.4	2282.0	2282.0	2288.1	2284.4	2286.9	2286.9	2285.6	2285.6
7.5°	2270.9	2270.9	2275.8	2272.2	2272.2	2275.8	2274.6	2277.1	2279.5	2280.8	2280.8
10°	2246.4	2248.8	2250.1	2250.1	2251.3	2255.0	2257.4	2262.4	2264.8	2267.2	2268.5
12.5°	2215.7	2219.4	2220.6	2219.4	2223.1	2228.0	2234.1	2240.3	2244.0	2248.8	2252.5
15°	2178.9	2178.9	2181.4	2185.1	2187.5	2194.9	2201.0	2208.3	2218.2	2224.3	2230.4
17.5°	2138.4	2140.9	2144.6	2144.6	2149.5	2161.7	2165.4	2176.5	2187.5	2193.6	2205.9
20°	2094.3	2096.7	2100.4	2102.9	2109.0	2118.8	2126.2	2136.0	2148.2	2159.3	2171.5
22.5°	2059.9	2055.0	2057.4	2059.9	2066.1	2074.6	2083.2	2095.5	2107.8	2118.8	2131.1
25°	1993.6	1994.9	1998.6	2001.0	2008.4	2015.7	2025.6	2040.3	2051.3	2063.6	2077.1
27.5°	1904.1	1905.3	1911.5	1911.5	1917.6	1929.9	1936.0	1948.3	1963.0	1975.2	1991.2
30°	1802.3	1804.7	1804.7	1809.6	1813.3	1819.4	1825.6	1837.8	1845.2	1856.3	1878.3
32.5°	1709.0	1711.5	1710.2	1709.0	1705.3	1704.1	1702.9	1705.3	1707.8	1711.5	1720.1
35°	1653.8	1647.7	1642.8	1634.2	1624.4	1612.1	1601.1	1586.3	1572.8	1561.8	1549.5
37.5°	1601.1	1599.8	1592.5	1580.2	1560.6	1538.5	1512.7	1480.8	1448.9	1414.6	1381.5
40°	1527.4	1523.8	1517.6	1500.5	1478.4	1451.4	1417.0	1377.8	1326.2	1273.5	1219.5
42.5°	1402.3	1403.5	1396.2	1382.7	1361.8	1336.0	1300.5	1257.5	1202.3	1139.7	1069.8
45°	1256.3	1256.3	1253.9	1242.8	1228.1	1207.2	1180.2	1144.7	1090.7	1026.9	952.0
47.5°	1104.2	1105.4	1101.7	1099.3	1093.1	1079.6	1060.0	1033.0	995.0	933.6	858.8
50°	949.6	949.6	955.7	954.5	954.5	949.6	941.0	925.0	891.9	842.9	772.9
52.5°	795.0	797.5	801.2	806.1	812.2	822.0	812.2	804.8	784.0	745.9	685.8
55°	635.5	638.0	644.1	652.7	660.1	669.9	672.3	672.3	661.3	635.5	590.1
57.5°	499.3	495.7	500.6	507.9	517.7	527.6	534.9	543.5	542.3	525.1	488.3
60°	375.4	376.7	380.3	387.7	395.1	403.6	413.5	420.8	424.5	415.9	392.6
62.5°	273.6	273.6	278.5	285.8	289.5	301.8	307.9	311.6	315.3	314.1	299.4
65°	191.4	193.8	196.3	200.0	203.7	211.0	214.7	222.1	224.5	225.7	214.7
67.5°	135.0	131.3	133.7	136.2	139.9	144.8	152.1	152.1	155.8	155.8	148.4
70°	85.9	85.9	87.1	90.8	93.2	94.5	96.9	99.4	103.1	101.8	101.8
72.5°	57.7	56.4	57.7	58.9	60.1	63.8	63.8	65.0	67.5	68.7	63.8
75°	29.4	30.7	33.1	31.9	35.6	33.1	34.3	38.0	36.8	34.3	34.3
77.5°	24.5	24.5	24.5	23.3	25.8	25.8	24.5	27.0	25.8	25.8	24.5
80°	17.2	18.4	17.2	15.9	17.2	15.9	15.9	15.9	15.9	15.9	14.7
82.5°	13.5	11.0	12.3	11.0	12.3	12.3	11.0	9.8	9.8	11.0	9.8
85°	9.8	7.4	8.6	8.6	7.4	7.4	7.4	7.4	7.4	6.1	6.1
87.5°	6.1	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°	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6
2.5°	2289.3	2288.1	2290.6	2289.3	2289.3	2288.1	2289.3	2288.1	2290.6	2285.6	2286.9
5°	2289.3	2286.9	2288.1	2289.3	2290.6	2288.1	2288.1	2288.1	2290.6	2288.1	2289.3
7.5°	2284.4	2283.2	2286.9	2289.3	2288.1	2286.9	2289.3	2288.1	2290.6	2289.3	2291.8
10°	2274.6	2275.8	2278.3	2282.0	2283.2	2284.4	2286.9	2286.9	2290.6	2285.6	2288.1
12.5°	2259.9	2264.8	2270.9	2273.4	2278.3	2278.3	2280.8	2282.0	2284.4	2283.2	2286.9
15°	2241.5	2247.6	2255.0	2261.1	2267.2	2270.9	2274.6	2275.8	2279.5	2275.8	2277.1
17.5°	2219.4	2226.8	2237.8	2245.2	2255.0	2258.7	2263.6	2266.0	2269.7	2267.2	2268.5
20°	2188.7	2197.3	2209.6	2220.6	2226.8	2235.3	2241.5	2245.2	2247.6	2245.2	2246.4
22.5°	2145.8	2158.1	2174.0	2182.6	2194.9	2202.2	2203.5	2212.0	2218.2	2212.0	2214.5
25°	2095.5	2107.8	2120.0	2138.4	2149.5	2158.1	2166.7	2167.9	2174.0	2172.8	2171.5
27.5°	2012.1	2028.0	2048.9	2063.6	2078.3	2091.8	2101.6	2104.1	2110.2	2107.8	2109.0
30°	1897.9	1915.1	1934.8	1958.1	1978.9	1992.4	2004.7	2013.3	2019.4	2015.7	2014.5
32.5°	1736.0	1753.2	1774.1	1797.4	1821.9	1841.5	1856.3	1867.3	1874.7	1872.2	1866.1
35°	1550.8	1555.7	1569.2	1587.6	1608.4	1629.3	1642.8	1655.0	1663.6	1666.1	1666.1
37.5°	1360.6	1344.7	1334.8	1334.8	1347.1	1355.7	1368.0	1375.3	1388.8	1393.7	1397.4
40°	1176.6	1139.7	1105.4	1079.6	1062.5	1061.2	1061.2	1064.9	1077.2	1093.1	1107.9
42.5°	1012.2	953.3	900.5	852.7	818.3	798.7	790.1	791.3	801.2	815.9	840.4
45°	880.9	807.3	741.0	683.4	636.7	606.1	591.4	590.1	597.5	614.6	641.7
47.5°	779.1	700.5	625.7	559.4	509.2	476.0	458.8	454.0	458.8	474.8	506.7
50°	694.4	613.4	536.1	467.4	413.5	379.1	363.1	357.0	363.1	376.7	408.5
52.5°	615.9	532.5	460.1	393.8	336.2	306.7	289.5	285.8	289.5	305.5	331.3
55°	525.1	454.0	382.8	316.5	266.2	236.8	223.3	219.6	223.3	238.0	265.0
57.5°	435.6	374.2	311.6	251.5	208.6	182.8	170.5	165.6	174.2	184.0	215.9
60°	352.1	303.0	250.3	197.5	162.0	138.6	128.8	127.6	130.0	142.3	164.4
62.5°	276.1	235.6	193.8	150.9	121.5	111.6	99.4	98.2	100.6	108.0	125.2
65°	198.8	173.0	141.1	110.4	87.1	73.6	68.7	69.9	72.4	77.3	93.2
67.5°	138.6	120.2	98.2	77.3	60.1	54.0	49.1	47.9	49.1	57.7	66.3
70°	93.2	82.2	66.3	58.9	41.7	33.1	34.3	30.7	35.6	35.6	42.9
72.5°	61.3	54.0	44.2	34.3	29.4	23.3	23.3	22.1	24.5	25.8	31.9
75°	31.9	24.5	24.5	17.2	12.3	6.1	11.0	9.8	8.6	9.8	12.3
77.5°	22.1	18.4	17.2	13.5	12.3	9.8	9.8	9.8	9.8	11.0	12.3
80°	13.5	13.5	9.8	8.6	7.4	6.1	7.4	7.4	7.4	7.4	8.6
82.5°	8.6	7.4	7.4	6.1	6.1	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	6.1	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°	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6	2285.6
2.5°	2289.3	2290.6	2290.6	2289.3	2289.3	2286.9	2291.8	2288.1	2289.3	2294.2	2290.6
5°	2291.8	2293.0	2293.0	2291.8	2291.8	2291.8	2293.0	2293.0	2291.8	2290.6	2293.0
7.5°	2296.7	2295.5	2295.5	2293.0	2293.0	2290.6	2293.0	2289.3	2291.8	2289.3	2293.0
10°	2290.6	2291.8	2290.6	2289.3	2289.3	2288.1	2288.1	2284.4	2285.6	2282.0	2284.4
12.5°	2286.9	2285.6	2285.6	2283.2	2280.8	2278.3	2277.1	2273.4	2273.4	2264.8	2268.5
15°	2277.1	2278.3	2274.6	2269.7	2267.2	2261.1	2258.7	2253.7	2248.8	2242.7	2244.0
17.5°	2268.5	2264.8	2259.9	2255.0	2245.2	2240.3	2235.3	2228.0	2225.5	2218.2	2215.7
20°	2242.7	2240.3	2234.1	2225.5	2219.4	2208.3	2203.5	2196.1	2189.9	2182.6	2178.9
22.5°	2209.6	2207.1	2199.8	2191.2	2181.4	2176.5	2171.5	2158.1	2151.9	2144.6	2143.3
25°	2167.9	2164.2	2156.8	2147.0	2142.1	2128.6	2123.7	2113.9	2111.4	2104.1	2102.9
27.5°	2104.1	2099.2	2090.6	2078.3	2069.7	2061.1	2056.2	2048.9	2046.4	2039.0	2037.8
30°	2008.4	2002.2	1985.1	1980.2	1965.4	1956.8	1956.8	1947.0	1948.3	1943.4	1943.4
32.5°	1857.5	1847.7	1834.2	1824.3	1814.5	1809.6	1809.6	1805.9	1808.4	1808.4	1810.9
35°	1657.5	1644.0	1636.6	1630.5	1630.5	1635.4	1650.1	1653.8	1661.2	1667.3	1672.2
37.5°	1401.1	1399.9	1408.5	1415.8	1434.2	1455.1	1480.8	1502.9	1523.8	1538.5	1553.2
40°	1123.8	1154.5	1179.0	1213.4	1241.6	1282.1	1328.7	1366.7	1402.3	1428.1	1455.1
42.5°	877.2	916.5	968.0	1018.3	1068.6	1123.8	1185.2	1237.9	1284.5	1320.1	1348.3
45°	683.4	737.3	799.9	863.7	928.7	997.5	1061.2	1115.2	1164.3	1201.1	1229.3
47.5°	550.9	609.8	680.9	750.8	824.5	896.8	968.0	1014.6	1055.1	1084.5	1110.3
50°	455.2	517.7	592.6	672.3	745.9	818.3	879.7	925.0	958.2	983.9	999.9
52.5°	380.3	446.6	526.3	606.1	679.7	745.9	801.2	835.5	862.5	880.9	895.6
55°	314.1	377.9	452.7	527.6	599.9	662.5	707.9	733.7	754.5	765.6	774.1
57.5°	256.4	315.3	384.0	452.7	515.3	566.8	602.4	628.2	638.0	646.6	645.3
60°	201.2	256.4	319.0	377.9	431.9	473.6	499.3	514.1	521.4	525.1	522.6
62.5°	158.3	208.6	256.4	307.9	347.2	382.8	407.3	407.3	411.0	412.2	415.9
65°	117.8	155.8	197.5	235.6	267.4	290.8	304.3	307.9	312.9	311.6	309.2
67.5°	87.1	115.3	146.0	174.2	196.3	211.0	220.8	229.4	228.2	225.7	224.5
70°	60.1	78.5	105.5	122.7	138.6	153.4	155.8	157.0	158.3	159.5	157.0
72.5°	41.7	55.2	69.9	84.7	94.5	100.6	106.7	108.0	108.0	108.0	106.7
75°	20.9	28.2	41.7	47.9	56.4	58.9	63.8	63.8	67.5	62.6	61.3
77.5°	18.4	22.1	29.4	34.3	38.0	41.7	42.9	46.6	45.4	42.9	44.2
80°	11.0	13.5	18.4	20.9	25.8	27.0	28.2	29.4	28.2	29.4	29.4
82.5°	8.6	9.8	12.3	12.3	15.9	15.9	17.2	17.2	18.4	18.4	18.4
85°	4.9	8.6	7.4	14.7	9.8	9.8	12.3	14.7	12.3	12.3	14.7
87.5°	4.9	4.9	3.7	4.9	4.9	4.9	6.1	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: P246052

CATALOG NUMBER: LSR8B40D010 EC8B40840 8LBDW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2285.6	2285.6	2285.6	2285.6
2.5°	2289.3	2291.8	2288.1	2286.9
5°	2293.0	2293.0	2290.6	2290.6
7.5°	2293.0	2293.0	2289.3	2286.9
10°	2283.2	2283.2	2279.5	2277.1
12.5°	2264.8	2264.8	2263.6	2259.9
15°	2241.5	2241.5	2236.6	2232.9
17.5°	2209.6	2212.0	2205.9	2205.9
20°	2175.2	2174.0	2169.1	2166.7
22.5°	2139.7	2137.2	2136.0	2128.6
25°	2101.6	2099.2	2095.5	2091.8
27.5°	2036.6	2035.4	2031.7	2026.8
30°	1937.2	1936.0	1931.1	1931.1
32.5°	1808.4	1807.2	1802.3	1803.5
35°	1674.7	1679.6	1677.1	1672.2
37.5°	1563.0	1566.7	1569.2	1566.7
40°	1469.8	1480.8	1482.1	1484.5
42.5°	1370.4	1385.1	1390.0	1392.5
45°	1251.4	1264.9	1275.9	1273.5
47.5°	1129.9	1139.7	1149.6	1142.2
50°	1013.4	1019.5	1023.2	1023.2
52.5°	903.0	903.0	901.8	903.0
55°	776.6	776.6	771.7	774.1
57.5°	644.1	646.6	642.9	636.7
60°	521.4	515.3	512.8	509.2
62.5°	406.1	406.1	397.5	408.5
65°	304.3	300.6	296.9	295.7
67.5°	220.8	219.6	215.9	214.7
70°	155.8	150.9	149.7	147.2
72.5°	104.3	104.3	101.8	101.8
75°	63.8	57.7	56.4	57.7
77.5°	44.2	42.9	42.9	41.7
80°	29.4	28.2	30.7	27.0
82.5°	18.4	19.6	18.4	19.6
85°	12.3	14.7	13.5	13.5
87.5°	7.4	7.4	7.4	7.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)