

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: P244612

Luminaire Tested: **LSR8B40D010 EC8B40840 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244612
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4432.0 lumens
Efficiency: N/A
Efficacy: 108.4 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

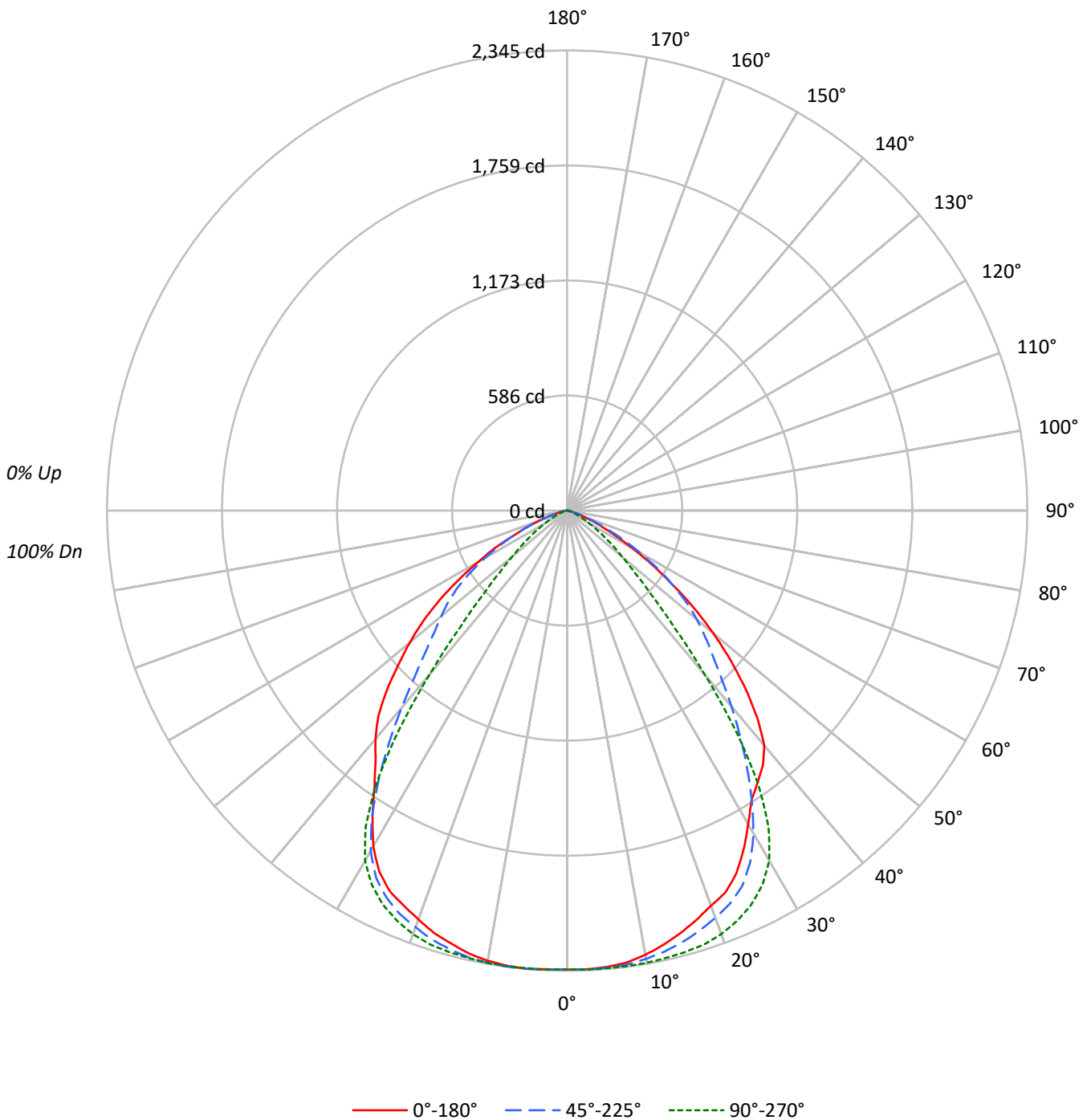
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	72108	72108	72108
5°	72265	72460	72538
10°	71961	73261	72944
15°	71165	74332	72927
20°	70310	75377	72742
25°	69399	75462	72815
30°	65655	73343	70348
35°	63694	63739	64402
40°	62905	43857	61138
45°	56051	26327	56818
50°	46606	17524	50218
55°	34956	12080	42579
60°	23688	8048	32125
65°	14287	5224	22072
70°	7925	2831	13578
75°	3586	1191	7029
80°	3125	1332	4901
85°	3538	1769	4883



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.2	5.0
10°-20°	648.1	14.6
20°-30°	983.7	22.2
30°-40°	1033.2	23.3
40°-50°	774.6	17.5
50°-60°	497.0	11.2
60°-70°	212.6	4.8
70°-80°	50.2	1.1
80°-90°	9.3	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°	1855.0	41.9
0°-40°	2888.2	65.2
0°-60°	4159.8	93.9
0°-90°	4432.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4432.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2338	2338	2338	2338	2338	
5°	2335	2338	2341	2345	2343	222
15°	2229	2276	2328	2313	2284	629
25°	2040	2111	2218	2178	2140	932
35°	1692	1598	1693	1673	1711	1062
45°	1285	1051	604	1020	1303	984
55°	650	650	225	678	792	590
65°	196	231	72	298	302	209
75°	30	35	10	60	59	44
85°	10	6	5	10	14	11
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°	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4
2.5°	2339.7	2342.2	2340.9	2340.9	2339.7	2340.9	2340.9	2343.4	2343.4	2340.9	2339.7
5°	2334.6	2337.2	2337.2	2334.6	2334.6	2340.9	2337.2	2339.7	2339.7	2338.4	2338.4
7.5°	2323.4	2323.4	2328.4	2324.6	2324.6	2328.4	2327.1	2329.6	2332.1	2333.4	2333.4
10°	2298.2	2300.8	2302.0	2302.0	2303.3	2307.0	2309.5	2314.6	2317.1	2319.6	2320.8
12.5°	2266.9	2270.6	2271.9	2270.6	2274.4	2279.4	2285.7	2292.0	2295.8	2300.8	2304.5
15°	2229.2	2229.2	2231.7	2235.5	2238.0	2245.5	2251.8	2259.3	2269.4	2275.7	2281.9
17.5°	2187.8	2190.3	2194.1	2194.1	2199.1	2211.6	2215.4	2226.7	2238.0	2244.3	2256.8
20°	2142.6	2145.1	2148.9	2151.4	2157.7	2167.7	2175.2	2185.3	2197.8	2209.1	2221.7
22.5°	2107.5	2102.4	2104.9	2107.5	2113.7	2122.5	2131.3	2143.8	2156.4	2167.7	2180.3
25°	2039.7	2040.9	2044.7	2047.2	2054.8	2062.3	2072.3	2087.4	2098.7	2111.2	2125.0
27.5°	1948.1	1949.3	1955.6	1955.6	1961.8	1974.4	1980.7	1993.2	2008.3	2020.8	2037.2
30°	1843.9	1846.4	1846.4	1851.4	1855.2	1861.4	1867.7	1880.3	1887.8	1899.1	1921.7
32.5°	1748.5	1751.0	1749.7	1748.5	1744.7	1743.5	1742.2	1744.7	1747.2	1751.0	1759.8
35°	1692.0	1685.7	1680.7	1671.9	1661.9	1649.3	1638.0	1623.0	1609.1	1597.8	1585.3
37.5°	1638.0	1636.8	1629.2	1616.7	1596.6	1574.0	1547.7	1515.0	1482.4	1447.2	1413.4
40°	1562.7	1558.9	1552.7	1535.1	1512.5	1484.9	1449.7	1409.6	1356.8	1302.9	1247.7
42.5°	1434.7	1435.9	1428.4	1414.6	1393.3	1366.9	1330.5	1286.6	1230.1	1166.1	1094.5
45°	1285.3	1285.3	1282.8	1271.5	1256.4	1235.1	1207.5	1171.1	1115.9	1050.6	974.0
47.5°	1129.7	1130.9	1127.1	1124.7	1118.4	1104.6	1084.5	1056.9	1018.0	955.2	878.6
50°	971.5	971.5	977.8	976.5	976.5	971.5	962.7	946.4	912.5	862.3	790.8
52.5°	813.4	815.9	819.7	824.7	830.9	841.0	830.9	823.4	802.1	763.1	701.7
55°	650.2	652.7	659.0	667.7	675.3	685.3	687.8	687.8	676.5	650.2	603.7
57.5°	510.9	507.1	512.1	519.7	529.7	539.7	547.3	556.0	554.8	537.2	499.6
60°	384.1	385.3	389.1	396.6	404.2	413.0	423.0	430.5	434.3	425.5	401.7
62.5°	279.9	279.9	284.9	292.4	296.2	308.8	315.0	318.8	322.6	321.3	306.3
65°	195.8	198.3	200.8	204.6	208.4	215.9	219.7	227.2	229.7	231.0	219.7
67.5°	138.1	134.3	136.8	139.3	143.1	148.1	155.7	155.7	159.4	159.4	151.9
70°	87.9	87.9	89.1	92.9	95.4	96.7	99.2	101.7	105.4	104.2	104.2
72.5°	59.0	57.7	59.0	60.3	61.5	65.3	65.3	66.5	69.0	70.3	65.3
75°	30.1	31.4	33.9	32.6	36.4	33.9	35.1	38.9	37.7	35.1	35.1
77.5°	25.1	25.1	25.1	23.9	26.4	26.4	25.1	27.6	26.4	26.4	25.1
80°	17.6	18.8	17.6	16.3	17.6	16.3	16.3	16.3	16.3	16.3	15.0
82.5°	13.8	11.3	12.6	11.3	12.6	12.6	11.3	10.0	10.0	11.3	10.0
85°	10.0	7.5	8.8	8.8	7.5	7.5	7.5	7.5	7.5	6.3	6.3
87.5°	6.3	3.8	3.8	3.8	5.0	5.0	5.0	3.8	5.0	5.0	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°	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4
2.5°	2342.2	2340.9	2343.4	2342.2	2342.2	2340.9	2342.2	2340.9	2343.4	2338.4	2339.7
5°	2342.2	2339.7	2340.9	2342.2	2343.4	2340.9	2340.9	2340.9	2343.4	2340.9	2342.2
7.5°	2337.2	2335.9	2339.7	2342.2	2340.9	2339.7	2342.2	2340.9	2343.4	2342.2	2344.7
10°	2327.1	2328.4	2330.9	2334.6	2335.9	2337.2	2339.7	2339.7	2343.4	2338.4	2340.9
12.5°	2312.1	2317.1	2323.4	2325.8	2330.9	2330.9	2333.4	2334.6	2337.2	2335.9	2339.7
15°	2293.2	2299.5	2307.0	2313.3	2319.6	2323.4	2327.1	2328.4	2332.1	2328.4	2329.6
17.5°	2270.6	2278.2	2289.5	2297.0	2307.0	2310.8	2315.8	2318.3	2322.1	2319.6	2320.8
20°	2239.2	2248.1	2260.6	2271.9	2278.2	2286.9	2293.2	2297.0	2299.5	2297.0	2298.2
22.5°	2195.3	2207.9	2224.2	2233.0	2245.5	2253.1	2254.3	2263.1	2269.4	2263.1	2265.6
25°	2143.8	2156.4	2169.0	2187.8	2199.1	2207.9	2216.7	2217.9	2224.2	2222.9	2221.7
27.5°	2058.5	2074.8	2096.2	2111.2	2126.3	2140.1	2150.1	2152.6	2158.9	2156.4	2157.7
30°	1941.8	1959.4	1979.4	2003.3	2024.6	2038.4	2051.0	2059.8	2066.0	2062.3	2061.0
32.5°	1776.1	1793.7	1815.0	1838.8	1864.0	1884.0	1899.1	1910.4	1917.9	1915.4	1909.1
35°	1586.6	1591.6	1605.4	1624.2	1645.5	1666.9	1680.7	1693.2	1702.0	1704.5	1704.5
37.5°	1392.0	1375.7	1365.7	1365.7	1378.2	1387.0	1399.5	1407.1	1420.9	1425.9	1429.7
40°	1203.7	1166.1	1130.9	1104.6	1087.0	1085.7	1085.7	1089.5	1102.1	1118.4	1133.4
42.5°	1035.5	975.3	921.3	872.4	837.2	817.1	808.3	809.6	819.7	834.7	859.8
45°	901.2	825.9	758.1	699.1	651.4	620.1	605.0	603.7	611.3	628.8	656.5
47.5°	797.0	716.7	640.1	572.4	520.9	487.0	469.4	464.4	469.4	485.7	518.4
50°	710.4	627.6	548.5	478.2	423.0	387.9	371.5	365.3	371.5	385.3	418.0
52.5°	630.1	544.7	470.7	402.9	343.9	313.8	296.2	292.4	296.2	312.5	338.9
55°	537.2	464.4	391.6	323.8	272.4	242.3	228.4	224.7	228.4	243.5	271.1
57.5°	445.6	382.8	318.8	257.3	213.4	187.0	174.5	169.4	178.2	188.3	220.9
60°	360.2	310.0	256.0	202.1	165.7	141.8	131.8	130.5	133.0	145.6	168.2
62.5°	282.4	241.0	198.3	154.4	124.3	114.2	101.7	100.4	102.9	110.4	128.0
65°	203.3	177.0	144.3	113.0	89.1	75.3	70.3	71.6	74.0	79.1	95.4
67.5°	141.8	123.0	100.4	79.1	61.5	55.2	50.2	49.0	50.2	59.0	67.8
70°	95.4	84.1	67.8	60.3	42.7	33.9	35.1	31.4	36.4	36.4	43.9
72.5°	62.7	55.2	45.2	35.1	30.1	23.9	23.9	22.6	25.1	26.4	32.6
75°	32.6	25.1	25.1	17.6	12.6	6.3	11.3	10.0	8.8	10.0	12.6
77.5°	22.6	18.8	17.6	13.8	12.6	10.0	10.0	10.0	10.0	11.3	12.6
80°	13.8	13.8	10.0	8.8	7.5	6.3	7.5	7.5	7.5	7.5	8.8
82.5°	8.8	7.5	7.5	6.3	6.3	5.0	5.0	5.0	5.0	5.0	7.5
85°	7.5	5.0	5.0	3.8	5.0	8.8	3.8	5.0	5.0	5.0	3.8
87.5°	2.5	3.8	3.8	3.8	2.5	1.3	2.5	3.8	3.8	6.3	5.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4	2338.4
2.5°	2342.2	2343.4	2343.4	2342.2	2342.2	2339.7	2344.7	2340.9	2342.2	2347.2	2343.4
5°	2344.7	2345.9	2345.9	2344.7	2344.7	2344.7	2345.9	2345.9	2344.7	2343.4	2345.9
7.5°	2349.7	2348.5	2348.5	2345.9	2345.9	2343.4	2345.9	2342.2	2344.7	2342.2	2345.9
10°	2343.4	2344.7	2343.4	2342.2	2342.2	2340.9	2340.9	2337.2	2338.4	2334.6	2337.2
12.5°	2339.7	2338.4	2338.4	2335.9	2333.4	2330.9	2329.6	2325.8	2325.8	2317.1	2320.8
15°	2329.6	2330.9	2327.1	2322.1	2319.6	2313.3	2310.8	2305.8	2300.8	2294.5	2295.8
17.5°	2320.8	2317.1	2312.1	2307.0	2297.0	2292.0	2286.9	2279.4	2276.9	2269.4	2266.9
20°	2294.5	2292.0	2285.7	2276.9	2270.6	2259.3	2254.3	2246.8	2240.5	2233.0	2229.2
22.5°	2260.6	2258.1	2250.5	2241.8	2231.7	2226.7	2221.7	2207.9	2201.6	2194.1	2192.8
25°	2217.9	2214.1	2206.6	2196.6	2191.5	2177.8	2172.7	2162.7	2160.2	2152.6	2151.4
27.5°	2152.6	2147.6	2138.8	2126.3	2117.5	2108.7	2103.7	2096.2	2093.7	2086.1	2084.9
30°	2054.8	2048.5	2030.9	2025.9	2010.8	2002.0	2002.0	1992.0	1993.2	1988.2	1988.2
32.5°	1900.4	1890.3	1876.5	1866.5	1856.4	1851.4	1851.4	1847.6	1850.1	1850.1	1852.7
35°	1695.8	1682.0	1674.4	1668.1	1668.1	1673.2	1688.2	1692.0	1699.5	1705.8	1710.8
37.5°	1433.4	1432.2	1441.0	1448.5	1467.3	1488.7	1515.0	1537.6	1558.9	1574.0	1589.1
40°	1149.7	1181.1	1206.2	1241.4	1270.2	1311.7	1359.4	1398.3	1434.7	1461.0	1488.7
42.5°	897.4	937.6	990.4	1041.8	1093.3	1149.7	1212.5	1266.5	1314.2	1350.6	1379.4
45°	699.1	754.4	818.4	883.7	950.2	1020.5	1085.7	1141.0	1191.2	1228.8	1257.7
47.5°	563.6	623.8	696.6	768.2	843.5	917.5	990.4	1038.0	1079.4	1109.6	1136.0
50°	465.7	529.7	606.3	687.8	763.1	837.2	900.0	946.4	980.3	1006.7	1023.0
52.5°	389.1	456.9	538.5	620.1	695.4	763.1	819.7	854.8	882.4	901.2	916.3
55°	321.3	386.6	463.2	539.7	613.8	677.8	724.2	750.6	771.9	783.2	792.0
57.5°	262.3	322.6	392.9	463.2	527.2	579.9	616.3	642.7	652.7	661.5	660.2
60°	205.9	262.3	326.3	386.6	441.8	484.5	510.9	525.9	533.4	537.2	534.7
62.5°	161.9	213.4	262.3	315.0	355.2	391.6	416.7	416.7	420.5	421.7	425.5
65°	120.5	159.4	202.1	241.0	273.6	297.5	311.3	315.0	320.1	318.8	316.3
67.5°	89.1	118.0	149.4	178.2	200.8	215.9	225.9	234.7	233.5	231.0	229.7
70°	61.5	80.3	108.0	125.5	141.8	156.9	159.4	160.7	161.9	163.2	160.7
72.5°	42.7	56.5	71.6	86.6	96.7	102.9	109.2	110.4	110.4	110.4	109.2
75°	21.3	28.9	42.7	49.0	57.7	60.3	65.3	65.3	69.0	64.0	62.7
77.5°	18.8	22.6	30.1	35.1	38.9	42.7	43.9	47.7	46.4	43.9	45.2
80°	11.3	13.8	18.8	21.3	26.4	27.6	28.9	30.1	28.9	30.1	30.1
82.5°	8.8	10.0	12.6	12.6	16.3	16.3	17.6	17.6	18.8	18.8	18.8
85°	5.0	8.8	7.5	15.0	10.0	10.0	12.6	15.0	12.6	12.6	15.0
87.5°	5.0	5.0	3.8	5.0	5.0	5.0	6.3	7.5	7.5	8.8	7.5
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: P244612

CATALOG NUMBER: LSR8B40D010 EC8B40840 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2338.4	2338.4	2338.4	2338.4
2.5°	2342.2	2344.7	2340.9	2339.7
5°	2345.9	2345.9	2343.4	2343.4
7.5°	2345.9	2345.9	2342.2	2339.7
10°	2335.9	2335.9	2332.1	2329.6
12.5°	2317.1	2317.1	2315.8	2312.1
15°	2293.2	2293.2	2288.2	2284.4
17.5°	2260.6	2263.1	2256.8	2256.8
20°	2225.4	2224.2	2219.2	2216.7
22.5°	2189.1	2186.5	2185.3	2177.8
25°	2150.1	2147.6	2143.8	2140.1
27.5°	2083.6	2082.4	2078.6	2073.6
30°	1981.9	1980.7	1975.7	1975.7
32.5°	1850.1	1848.9	1843.9	1845.1
35°	1713.3	1718.4	1715.8	1710.8
37.5°	1599.1	1602.9	1605.4	1602.9
40°	1503.7	1515.0	1516.3	1518.8
42.5°	1402.1	1417.1	1422.1	1424.6
45°	1280.3	1294.1	1305.4	1302.9
47.5°	1156.0	1166.1	1176.1	1168.6
50°	1036.8	1043.1	1046.8	1046.8
52.5°	923.8	923.8	922.6	923.8
55°	794.5	794.5	789.5	792.0
57.5°	659.0	661.5	657.7	651.4
60°	533.4	527.2	524.7	520.9
62.5°	415.5	415.5	406.7	418.0
65°	311.3	307.5	303.7	302.5
67.5°	225.9	224.7	220.9	219.7
70°	159.4	154.4	153.1	150.6
72.5°	106.7	106.7	104.2	104.2
75°	65.3	59.0	57.7	59.0
77.5°	45.2	43.9	43.9	42.7
80°	30.1	28.9	31.4	27.6
82.5°	18.8	20.1	18.8	20.1
85°	12.6	15.0	13.8	13.8
87.5°	7.5	7.5	7.5	7.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)