

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: P244618

Luminaire Tested: **LSR8B40D010 EC8B40850 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244618
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 EC8B40850 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4519.0 lumens
Efficiency: N/A
Efficacy: 110.5 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

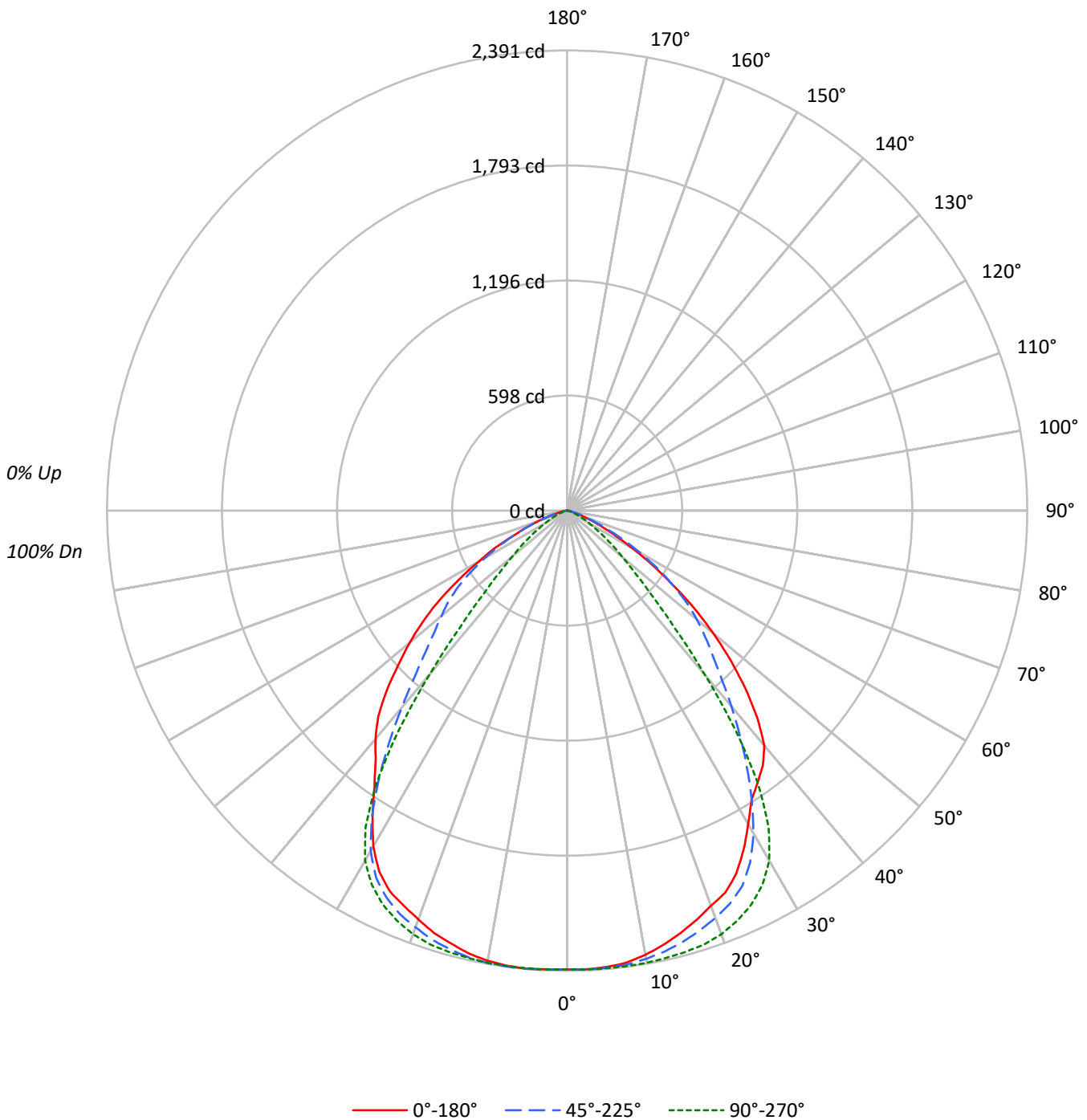
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	73523	73523	73523
5°	73686	73884	73962
10°	73377	74698	74379
15°	72563	75791	74361
20°	71692	76857	74169
25°	70760	76946	74244
30°	66944	74781	71726
35°	64944	64993	65667
40°	64141	44718	62337
45°	57150	26846	57935
50°	47522	17865	51206
55°	35638	12317	43418
60°	24151	8209	32754
65°	14571	5326	22502
70°	8078	2885	13848
75°	3658	1215	7172
80°	3179	1367	5008
85°	3609	1804	4989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.5	5.0
10°-20°	660.8	14.6
20°-30°	1003.0	22.2
30°-40°	1053.5	23.3
40°-50°	789.8	17.5
50°-60°	506.8	11.2
60°-70°	216.8	4.8
70°-80°	51.2	1.1
80°-90°	9.5	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°	1891.4	41.9
0°-40°	2944.9	65.2
0°-60°	4241.5	93.9
0°-90°	4519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4519.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2384	2384	2384	2384	2384	
5°	2380	2384	2387	2391	2389	226
15°	2273	2320	2374	2359	2329	641
25°	2080	2153	2262	2220	2182	950
35°	1725	1629	1726	1706	1744	1083
45°	1310	1071	616	1040	1328	1004
55°	663	663	229	691	808	601
65°	200	236	73	303	308	213
75°	31	36	10	61	60	45
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°	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3
2.5°	2385.6	2388.2	2386.9	2386.9	2385.6	2386.9	2386.9	2389.4	2389.4	2386.9	2385.6
5°	2380.5	2383.0	2383.0	2380.5	2380.5	2386.9	2383.0	2385.6	2385.6	2384.3	2384.3
7.5°	2369.0	2369.0	2374.1	2370.3	2370.3	2374.1	2372.8	2375.4	2377.9	2379.2	2379.2
10°	2343.4	2345.9	2347.2	2347.2	2348.5	2352.3	2354.9	2360.0	2362.5	2365.1	2366.4
12.5°	2311.4	2315.2	2316.5	2315.2	2319.1	2324.2	2330.6	2337.0	2340.8	2345.9	2349.8
15°	2273.0	2273.0	2275.5	2279.4	2281.9	2289.6	2296.0	2303.7	2313.9	2320.3	2326.7
17.5°	2230.7	2233.3	2237.1	2237.1	2242.3	2255.0	2258.9	2270.4	2281.9	2288.3	2301.1
20°	2184.7	2187.2	2191.1	2193.6	2200.0	2210.3	2217.9	2228.2	2241.0	2252.5	2265.3
22.5°	2148.8	2143.7	2146.3	2148.8	2155.2	2164.2	2173.2	2185.9	2198.7	2210.3	2223.1
25°	2079.7	2081.0	2084.8	2087.4	2095.1	2102.8	2113.0	2128.3	2139.9	2152.7	2166.7
27.5°	1986.3	1987.6	1994.0	1994.0	2000.4	2013.2	2019.6	2032.4	2047.7	2060.5	2077.2
30°	1880.1	1882.6	1882.6	1887.7	1891.6	1898.0	1904.4	1917.2	1924.9	1936.4	1959.4
32.5°	1782.8	1785.3	1784.1	1782.8	1779.0	1777.7	1776.4	1779.0	1781.5	1785.3	1794.3
35°	1725.2	1718.8	1713.7	1704.7	1694.5	1681.7	1670.2	1654.8	1640.7	1629.2	1616.4
37.5°	1670.2	1668.9	1661.2	1648.4	1627.9	1604.9	1578.0	1544.8	1511.5	1475.6	1441.1
40°	1593.4	1589.5	1583.1	1565.2	1542.2	1514.0	1478.2	1437.2	1383.5	1328.5	1272.2
42.5°	1462.8	1464.1	1456.4	1442.4	1420.6	1393.7	1356.6	1311.8	1254.2	1188.9	1116.0
45°	1310.5	1310.5	1308.0	1296.5	1281.1	1259.3	1231.2	1194.1	1137.8	1071.2	993.1
47.5°	1151.8	1153.1	1149.3	1146.7	1140.3	1126.3	1105.8	1077.6	1037.9	973.9	895.9
50°	990.6	990.6	997.0	995.7	995.7	990.6	981.6	965.0	930.4	879.2	806.3
52.5°	829.3	831.9	835.7	840.8	847.2	857.5	847.2	839.6	817.8	778.1	715.4
55°	662.9	665.5	671.9	680.9	688.6	698.8	701.3	701.3	689.8	662.9	615.6
57.5°	520.9	517.0	522.2	529.9	540.1	550.3	558.0	567.0	565.7	547.8	509.4
60°	391.6	392.9	396.7	404.4	412.1	421.1	431.3	439.0	442.8	433.9	409.5
62.5°	285.4	285.4	290.5	298.2	302.0	314.8	321.2	325.1	328.9	327.6	312.3
65°	199.7	202.2	204.8	208.6	212.4	220.1	224.0	231.6	234.2	235.5	224.0
67.5°	140.8	136.9	139.5	142.0	145.9	151.0	158.7	158.7	162.5	162.5	154.9
70°	89.6	89.6	90.9	94.7	97.3	98.5	101.1	103.7	107.5	106.2	106.2
72.5°	60.2	58.9	60.2	61.4	62.7	66.5	66.5	67.8	70.4	71.7	66.5
75°	30.7	32.0	34.5	33.3	37.1	34.5	35.8	39.7	38.4	35.8	35.8
77.5°	25.6	25.6	25.6	24.3	26.9	26.9	25.6	28.2	26.9	26.9	25.6
80°	17.9	19.2	17.9	16.6	17.9	16.6	16.6	16.6	16.6	16.6	15.3
82.5°	14.1	11.5	12.8	11.5	12.8	12.8	11.5	10.2	10.2	11.5	10.2
85°	10.2	7.7	9.0	9.0	7.7	7.7	7.7	7.7	7.7	6.4	6.4
87.5°	6.4	3.9	3.9	3.9	5.1	5.1	5.1	3.9	5.1	5.1	2.6
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°	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3
2.5°	2388.2	2386.9	2389.4	2388.2	2388.2	2386.9	2388.2	2386.9	2389.4	2384.3	2385.6
5°	2388.2	2385.6	2386.9	2388.2	2389.4	2386.9	2386.9	2386.9	2389.4	2386.9	2388.2
7.5°	2383.0	2381.7	2385.6	2388.2	2386.9	2385.6	2388.2	2386.9	2389.4	2388.2	2390.7
10°	2372.8	2374.1	2376.6	2380.5	2381.7	2383.0	2385.6	2385.6	2389.4	2384.3	2386.9
12.5°	2357.4	2362.5	2369.0	2371.5	2376.6	2376.6	2379.2	2380.5	2383.0	2381.7	2385.6
15°	2338.2	2344.6	2352.3	2358.7	2365.1	2369.0	2372.8	2374.1	2377.9	2374.1	2375.4
17.5°	2315.2	2322.9	2334.4	2342.1	2352.3	2356.2	2361.3	2363.8	2367.7	2365.1	2366.4
20°	2283.2	2292.2	2305.0	2316.5	2322.9	2331.8	2338.2	2342.1	2344.6	2342.1	2343.4
22.5°	2238.4	2251.2	2267.9	2276.8	2289.6	2297.3	2298.6	2307.5	2313.9	2307.5	2310.1
25°	2185.9	2198.7	2211.5	2230.7	2242.3	2251.2	2260.2	2261.5	2267.9	2266.6	2265.3
27.5°	2098.9	2115.6	2137.3	2152.7	2168.0	2182.1	2192.4	2194.9	2201.3	2198.7	2200.0
30°	1979.9	1997.8	2018.3	2042.6	2064.4	2078.4	2091.2	2100.2	2106.6	2102.8	2101.5
32.5°	1811.0	1828.9	1850.6	1874.9	1900.6	1921.0	1936.4	1947.9	1955.6	1953.0	1946.6
35°	1617.7	1622.8	1636.9	1656.1	1677.8	1699.6	1713.7	1726.5	1735.4	1738.0	1738.0
37.5°	1419.3	1402.7	1392.5	1392.5	1405.2	1414.2	1427.0	1434.7	1448.8	1453.9	1457.7
40°	1227.3	1188.9	1153.1	1126.3	1108.3	1107.1	1107.1	1110.9	1123.7	1140.3	1155.7
42.5°	1055.9	994.4	939.4	889.5	853.7	833.2	824.2	825.5	835.7	851.1	876.7
45°	918.9	842.1	773.0	712.9	664.2	632.2	616.9	615.6	623.3	641.2	669.4
47.5°	812.7	730.8	652.7	583.6	531.1	496.6	478.7	473.5	478.7	495.3	528.6
50°	724.4	639.9	559.3	487.6	431.3	395.5	378.8	372.4	378.8	392.9	426.2
52.5°	642.5	555.4	479.9	410.8	350.7	319.9	302.0	298.2	302.0	318.7	345.6
55°	547.8	473.5	399.3	330.2	277.7	247.0	232.9	229.1	232.9	248.3	276.5
57.5°	454.4	390.3	325.1	262.4	217.6	190.7	177.9	172.8	181.7	192.0	225.3
60°	367.3	316.1	261.1	206.1	168.9	144.6	134.4	133.1	135.7	148.5	171.5
62.5°	288.0	245.7	202.2	157.4	126.7	116.5	103.7	102.4	104.9	112.6	130.6
65°	207.3	180.5	147.2	115.2	90.9	76.8	71.7	73.0	75.5	80.6	97.3
67.5°	144.6	125.4	102.4	80.6	62.7	56.3	51.2	49.9	51.2	60.2	69.1
70°	97.3	85.7	69.1	61.4	43.5	34.5	35.8	32.0	37.1	37.1	44.8
72.5°	64.0	56.3	46.1	35.8	30.7	24.3	24.3	23.0	25.6	26.9	33.3
75°	33.3	25.6	25.6	17.9	12.8	6.4	11.5	10.2	9.0	10.2	12.8
77.5°	23.0	19.2	17.9	14.1	12.8	10.2	10.2	10.2	10.2	11.5	12.8
80°	14.1	14.1	10.2	9.0	7.7	6.4	7.7	7.7	7.7	7.7	9.0
82.5°	9.0	7.7	7.7	6.4	6.4	5.1	5.1	5.1	5.1	5.1	7.7
85°	7.7	5.1	5.1	3.9	5.1	9.0	3.9	5.1	5.1	5.1	3.9
87.5°	2.6	3.9	3.9	3.9	2.6	1.3	2.6	3.9	3.9	6.4	5.1
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°	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3	2384.3
2.5°	2388.2	2389.4	2389.4	2388.2	2388.2	2385.6	2390.7	2386.9	2388.2	2393.3	2389.4
5°	2390.7	2392.0	2392.0	2390.7	2390.7	2390.7	2392.0	2392.0	2390.7	2389.4	2392.0
7.5°	2395.8	2394.6	2394.6	2392.0	2392.0	2389.4	2392.0	2388.2	2390.7	2388.2	2392.0
10°	2389.4	2390.7	2389.4	2388.2	2388.2	2386.9	2386.9	2383.0	2384.3	2380.5	2383.0
12.5°	2385.6	2384.3	2384.3	2381.7	2379.2	2376.6	2375.4	2371.5	2371.5	2362.5	2366.4
15°	2375.4	2376.6	2372.8	2367.7	2365.1	2358.7	2356.2	2351.0	2345.9	2339.5	2340.8
17.5°	2366.4	2362.5	2357.4	2352.3	2342.1	2337.0	2331.8	2324.2	2321.6	2313.9	2311.4
20°	2339.5	2337.0	2330.6	2321.6	2315.2	2303.7	2298.6	2290.9	2284.5	2276.8	2273.0
22.5°	2305.0	2302.4	2294.7	2285.8	2275.5	2270.4	2265.3	2251.2	2244.8	2237.1	2235.8
25°	2261.5	2257.6	2249.9	2239.7	2234.6	2220.5	2215.4	2205.1	2202.6	2194.9	2193.6
27.5°	2194.9	2189.8	2180.8	2168.0	2159.1	2150.1	2145.0	2137.3	2134.8	2127.1	2125.8
30°	2095.1	2088.7	2070.8	2065.6	2050.3	2041.3	2041.3	2031.1	2032.4	2027.3	2027.3
32.5°	1937.7	1927.4	1913.3	1903.1	1892.9	1887.7	1887.7	1883.9	1886.5	1886.5	1889.0
35°	1729.0	1715.0	1707.3	1700.9	1700.9	1706.0	1721.4	1725.2	1732.9	1739.3	1744.4
37.5°	1461.5	1460.3	1469.2	1476.9	1496.1	1517.9	1544.8	1567.8	1589.5	1604.9	1620.3
40°	1172.3	1204.3	1229.9	1265.8	1295.2	1337.4	1386.0	1425.7	1462.8	1489.7	1517.9
42.5°	915.1	956.0	1009.8	1062.2	1114.7	1172.3	1236.3	1291.3	1340.0	1377.1	1406.5
45°	712.9	769.2	834.5	901.0	968.8	1040.5	1107.1	1163.4	1214.6	1253.0	1282.4
47.5°	574.6	636.1	710.3	783.3	860.0	935.5	1009.8	1058.4	1100.6	1131.4	1158.3
50°	474.8	540.1	618.2	701.3	778.1	853.7	917.6	965.0	999.6	1026.4	1043.0
52.5°	396.7	465.8	549.1	632.2	709.0	778.1	835.7	871.6	899.7	918.9	934.3
55°	327.6	394.2	472.3	550.3	625.8	691.1	738.4	765.3	787.1	798.6	807.6
57.5°	267.5	328.9	400.6	472.3	537.5	591.3	628.4	655.3	665.5	674.5	673.2
60°	209.9	267.5	332.8	394.2	450.5	494.0	520.9	536.2	543.9	547.8	545.2
62.5°	165.1	217.6	267.5	321.2	362.2	399.3	424.9	424.9	428.7	430.0	433.9
65°	122.9	162.5	206.1	245.7	279.0	303.3	317.4	321.2	326.4	325.1	322.5
67.5°	90.9	120.3	152.3	181.7	204.8	220.1	230.4	239.3	238.1	235.5	234.2
70°	62.7	81.9	110.1	128.0	144.6	160.0	162.5	163.8	165.1	166.4	163.8
72.5°	43.5	57.6	73.0	88.3	98.5	104.9	111.4	112.6	112.6	112.6	111.4
75°	21.8	29.4	43.5	49.9	58.9	61.4	66.5	66.5	70.4	65.3	64.0
77.5°	19.2	23.0	30.7	35.8	39.7	43.5	44.8	48.6	47.3	44.8	46.1
80°	11.5	14.1	19.2	21.8	26.9	28.2	29.4	30.7	29.4	30.7	30.7
82.5°	9.0	10.2	12.8	12.8	16.6	16.6	17.9	17.9	19.2	19.2	19.2
85°	5.1	9.0	7.7	15.3	10.2	10.2	12.8	15.3	12.8	12.8	15.3
87.5°	5.1	5.1	3.9	5.1	5.1	5.1	6.4	7.7	7.7	9.0	7.7
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: P244618

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2384.3	2384.3	2384.3	2384.3
2.5°	2388.2	2390.7	2386.9	2385.6
5°	2392.0	2392.0	2389.4	2389.4
7.5°	2392.0	2392.0	2388.2	2385.6
10°	2381.7	2381.7	2377.9	2375.4
12.5°	2362.5	2362.5	2361.3	2357.4
15°	2338.2	2338.2	2333.1	2329.3
17.5°	2305.0	2307.5	2301.1	2301.1
20°	2269.1	2267.9	2262.7	2260.2
22.5°	2232.0	2229.5	2228.2	2220.5
25°	2192.4	2189.8	2185.9	2182.1
27.5°	2124.5	2123.2	2119.4	2114.3
30°	2020.8	2019.6	2014.4	2014.4
32.5°	1886.5	1885.2	1880.1	1881.4
35°	1747.0	1752.1	1749.5	1744.4
37.5°	1630.5	1634.3	1636.9	1634.3
40°	1533.2	1544.8	1546.0	1548.6
42.5°	1429.6	1444.9	1450.1	1452.6
45°	1305.4	1319.5	1331.0	1328.5
47.5°	1178.7	1188.9	1199.2	1191.5
50°	1057.1	1063.5	1067.4	1067.4
52.5°	942.0	942.0	940.7	942.0
55°	810.1	810.1	805.0	807.6
57.5°	671.9	674.5	670.6	664.2
60°	543.9	537.5	535.0	531.1
62.5°	423.6	423.6	414.7	426.2
65°	317.4	313.6	309.7	308.4
67.5°	230.4	229.1	225.3	224.0
70°	162.5	157.4	156.1	153.6
72.5°	108.8	108.8	106.2	106.2
75°	66.5	60.2	58.9	60.2
77.5°	46.1	44.8	44.8	43.5
80°	30.7	29.4	32.0	28.2
82.5°	19.2	20.5	19.2	20.5
85°	12.8	15.3	14.1	14.1
87.5°	7.7	7.7	7.7	7.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)