

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: P244216

Luminaire Tested: **LSR8B40D010 EC8B40950 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244216  
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 EC8B40950 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4263.0 lumens  
Efficiency: N/A  
Efficacy: 104.2 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

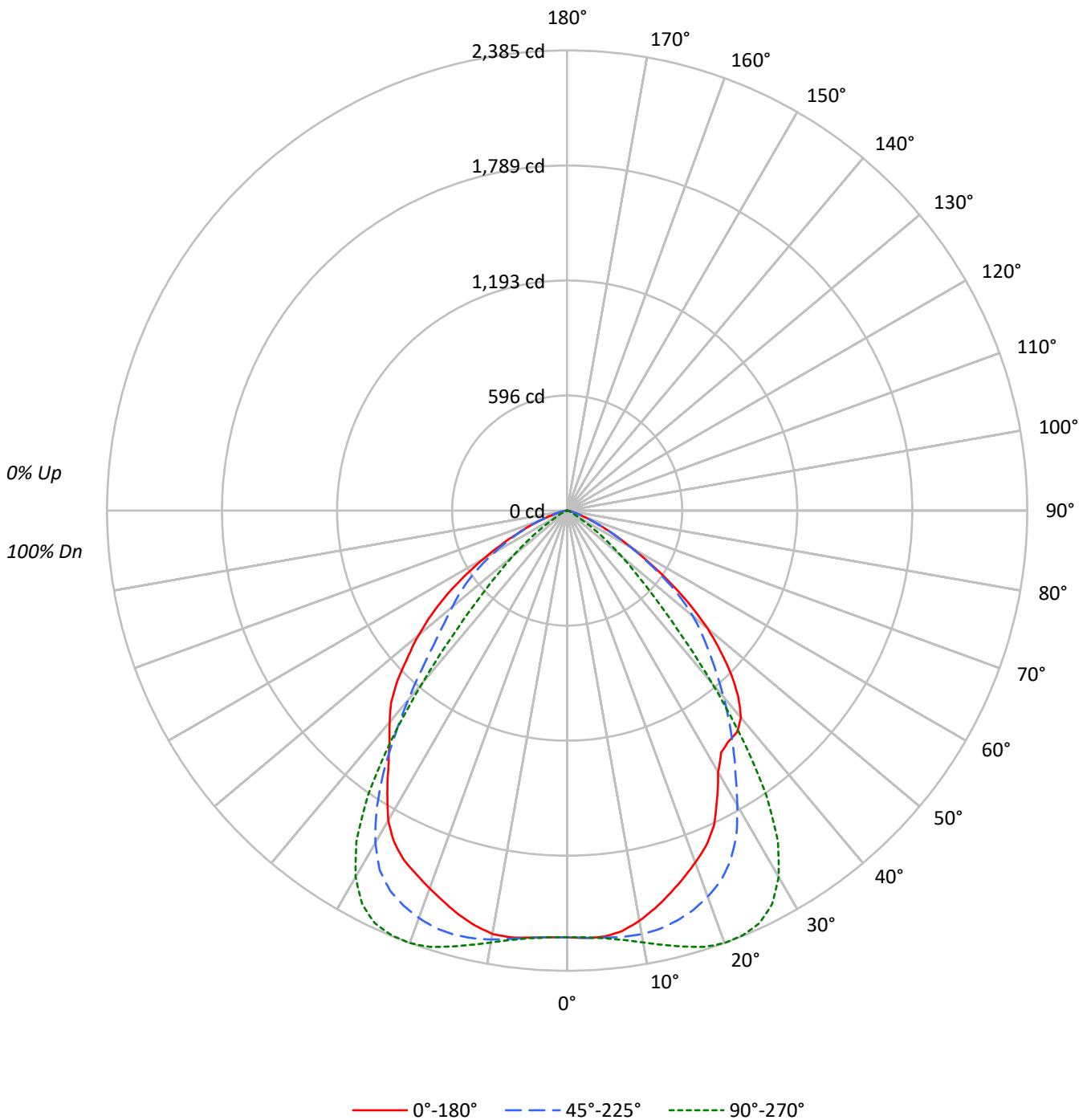
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	68195	68195	68195
5°	68600	68854	68783
10°	67593	71160	69763
15°	65617	74683	69215
20°	63711	78271	68374
25°	61267	80276	68055
30°	55757	78075	66040
35°	54927	67654	60758
40°	56420	46920	57599
45°	52523	28359	54158
50°	45555	17515	48261
55°	34961	9150	40955
60°	23818	3694	30910
65°	14819	1882	21328
70°	8042	1163	13019
75°	4194	560	7697
80°	1882	622	4173
85°	1238	425	3750



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.7	5.0
10°-20°	630.0	14.8
20°-30°	961.2	22.5
30°-40°	1003.0	23.5
40°-50°	753.4	17.7
50°-60°	463.5	10.9
60°-70°	188.6	4.4
70°-80°	44.4	1.0
80°-90°	6.1	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°	1803.9	42.3
0°-40°	2806.9	65.8
0°-60°	4023.8	94.4
0°-90°	4263.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4263.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2212	2212	2212	2212	2212	
5°	2216	2222	2224	2222	2222	210
15°	2055	2200	2339	2275	2168	579
25°	1801	2003	2359	2173	2000	819
35°	1459	1500	1797	1661	1614	921
45°	1204	1042	650	971	1242	919
55°	650	617	170	617	762	585
65°	203	205	26	276	292	212
75°	35	35	5	62	65	42
85°	4	4	1	8	11	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°	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5
2.5°	2217.4	2213.8	2217.4	2217.4	2218.6	2216.2	2217.4	2218.6	2216.2	2216.2	2216.2
5°	2216.2	2213.8	2216.2	2215.0	2217.4	2217.4	2219.7	2219.7	2222.1	2222.1	2225.6
7.5°	2197.4	2192.7	2197.4	2201.0	2203.3	2208.0	2213.8	2218.6	2223.2	2228.0	2233.8
10°	2158.7	2158.7	2162.2	2169.2	2176.3	2184.5	2195.1	2206.8	2218.6	2229.1	2239.7
12.5°	2110.6	2107.0	2114.1	2123.5	2134.0	2147.0	2163.4	2181.0	2199.8	2220.9	2237.3
15°	2055.4	2051.9	2060.1	2069.5	2082.4	2101.2	2121.1	2144.6	2171.6	2199.8	2226.8
17.5°	1999.0	1997.9	2006.1	2019.0	2029.6	2049.5	2075.4	2103.5	2134.0	2171.6	2206.8
20°	1941.5	1940.4	1948.6	1959.1	1973.2	1992.0	2017.8	2050.7	2087.1	2129.3	2170.4
22.5°	1881.7	1882.8	1889.9	1901.6	1913.4	1933.3	1960.3	1993.2	2033.1	2078.9	2124.6
25°	1800.7	1794.8	1804.2	1815.9	1835.9	1852.3	1878.1	1913.4	1954.4	2002.6	2056.6
27.5°	1683.3	1682.1	1690.3	1700.9	1718.5	1738.4	1766.6	1803.0	1846.4	1899.3	1952.1
30°	1565.9	1568.2	1571.8	1582.3	1594.1	1614.0	1642.2	1672.7	1713.8	1764.3	1820.6
32.5°	1486.1	1486.1	1490.8	1497.8	1506.0	1516.6	1536.6	1558.8	1590.6	1625.8	1666.8
35°	1459.1	1454.4	1459.1	1460.2	1461.4	1463.8	1467.3	1474.3	1484.9	1500.2	1515.4
37.5°	1447.3	1443.8	1443.8	1439.1	1433.2	1426.2	1416.8	1406.2	1394.5	1379.3	1367.5
40°	1401.6	1399.2	1396.9	1392.2	1379.3	1365.2	1349.9	1325.3	1298.3	1260.7	1223.1
42.5°	1313.5	1311.2	1310.0	1300.6	1288.9	1272.4	1254.8	1229.0	1195.0	1146.8	1092.8
45°	1204.4	1199.7	1196.1	1187.9	1179.7	1165.6	1149.2	1125.7	1091.7	1042.4	977.8
47.5°	1077.6	1075.2	1074.1	1070.5	1062.3	1054.1	1043.5	1024.8	994.2	947.3	880.4
50°	949.6	944.9	947.3	946.1	942.6	936.7	929.7	916.8	893.3	851.0	790.0
52.5°	802.9	802.9	801.7	805.2	806.4	805.2	806.4	792.3	772.4	740.7	689.0
55°	650.3	650.3	653.8	658.5	663.2	664.4	663.2	657.4	643.3	617.4	571.7
57.5°	507.1	504.8	511.8	518.8	523.5	528.2	524.7	520.0	511.8	490.7	455.4
60°	386.2	386.2	390.9	395.6	400.3	405.0	403.8	402.6	395.6	381.5	353.3
62.5°	284.1	285.2	285.2	288.8	293.5	298.2	301.7	298.2	294.6	285.2	266.5
65°	203.1	201.9	203.1	206.6	210.1	214.8	217.2	216.0	212.5	205.4	191.3
67.5°	136.2	135.0	139.7	140.9	143.2	147.9	146.7	147.9	146.7	140.9	129.1
70°	89.2	86.9	89.2	88.0	91.6	92.7	95.1	96.2	95.1	91.6	88.0
72.5°	55.2	54.0	55.2	56.4	57.5	58.7	61.0	61.0	59.9	57.5	52.8
75°	35.2	31.7	32.9	30.5	32.9	32.9	35.2	36.4	35.2	35.2	32.9
77.5°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	22.3	23.5	21.1	20.0
80°	10.6	10.6	11.7	11.7	11.7	12.9	11.7	11.7	11.7	12.9	9.4
82.5°	8.2	7.0	7.0	7.0	8.2	7.0	7.0	7.0	7.0	7.0	7.0
85°	3.5	4.7	3.5	2.4	3.5	3.5	4.7	3.5	3.5	3.5	4.7
87.5°	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	1.2	2.4	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°	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5
2.5°	2217.4	2215.0	2215.0	2213.8	2216.2	2213.8	2215.0	2213.8	2213.8	2216.2	2213.8
5°	2225.6	2226.8	2224.4	2223.2	2226.8	2226.8	2226.8	2224.4	2224.4	2225.6	2224.4
7.5°	2237.3	2239.7	2240.8	2242.0	2244.4	2245.6	2245.6	2244.4	2243.2	2246.7	2242.0
10°	2250.2	2253.8	2260.8	2264.3	2270.2	2270.2	2272.6	2272.6	2270.2	2272.6	2271.4
12.5°	2245.6	2266.7	2278.4	2286.6	2294.8	2301.9	2304.2	2305.4	2304.2	2308.9	2304.2
15°	2253.8	2271.4	2290.2	2304.2	2319.5	2327.7	2330.1	2339.4	2341.8	2343.0	2335.9
17.5°	2240.8	2272.6	2292.5	2313.6	2335.9	2351.2	2365.3	2371.2	2372.3	2374.7	2365.3
20°	2211.5	2246.7	2277.2	2307.8	2333.6	2357.1	2368.8	2385.2	2380.5	2389.9	2377.0
22.5°	2171.6	2211.5	2250.2	2290.2	2317.2	2345.3	2370.0	2381.7	2387.6	2387.6	2373.5
25°	2108.2	2155.2	2197.4	2238.5	2279.6	2313.6	2341.8	2359.4	2362.9	2361.8	2345.3
27.5°	2009.6	2060.1	2109.4	2156.3	2206.8	2246.7	2279.6	2300.7	2306.6	2306.6	2289.0
30°	1873.4	1927.4	1975.6	2031.9	2083.6	2128.2	2174.0	2192.7	2203.3	2203.3	2183.3
32.5°	1711.4	1757.2	1801.8	1857.0	1913.4	1963.8	2007.3	2033.1	2046.0	2044.8	2027.2
35°	1535.4	1557.7	1591.7	1632.8	1683.3	1730.2	1772.5	1797.2	1819.4	1818.3	1801.8
37.5°	1359.3	1353.4	1357.0	1372.2	1403.9	1436.8	1469.6	1493.1	1511.9	1520.1	1516.6
40°	1186.8	1156.2	1126.9	1116.3	1118.7	1130.4	1148.0	1165.6	1186.8	1197.3	1202.0
42.5°	1031.8	980.2	928.5	889.8	867.5	860.4	868.6	874.5	887.4	902.7	917.9
45°	907.4	838.1	770.0	710.2	672.6	650.3	645.6	650.3	657.4	672.6	692.6
47.5°	805.2	724.2	648.0	581.0	525.9	496.5	488.3	486.0	493.0	507.1	534.1
50°	714.9	633.9	549.4	471.9	414.4	381.5	369.8	365.1	373.3	383.8	408.5
52.5°	616.3	536.4	449.6	374.4	314.6	280.6	267.6	260.6	265.3	279.4	304.0
55°	509.4	435.5	356.8	279.4	221.8	190.2	174.9	170.2	174.9	190.2	214.8
57.5°	402.6	340.4	274.7	201.9	150.2	118.6	103.3	98.6	111.5	117.4	143.2
60°	314.6	264.1	207.8	147.9	103.3	78.6	63.4	59.9	65.7	76.3	97.4
62.5°	235.9	204.2	159.6	105.6	76.3	50.5	42.3	38.7	42.3	50.5	66.9
65°	171.4	146.7	111.5	77.5	51.6	37.6	28.2	25.8	29.4	35.2	49.3
67.5°	117.4	98.6	77.5	54.0	35.2	23.5	20.0	20.0	21.1	25.8	36.4
70°	76.3	64.6	49.3	35.2	23.5	17.6	15.3	12.9	15.3	18.8	24.6
72.5°	48.1	41.1	31.7	24.6	17.6	12.9	10.6	9.4	11.7	14.1	18.8
75°	29.4	22.3	16.4	12.9	9.4	9.4	9.4	4.7	5.9	9.4	11.7
77.5°	17.6	15.3	12.9	10.6	8.2	4.7	4.7	4.7	5.9	7.0	10.6
80°	9.4	8.2	5.9	5.9	4.7	3.5	4.7	3.5	2.4	5.9	7.0
82.5°	5.9	4.7	4.7	4.7	5.9	2.4	3.5	2.4	3.5	4.7	3.5
85°	3.5	3.5	3.5	2.4	5.9	2.4	2.4	1.2	1.2	2.4	2.4
87.5°	0.0	1.2	1.2	0.0	1.2	0.0	1.2	1.2	1.2	1.2	1.2
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°	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5	2211.5
2.5°	2215.0	2213.8	2215.0	2213.8	2213.8	2213.8	2215.0	2215.0	2213.8	2213.8	2216.2
5°	2224.4	2224.4	2224.4	2223.2	2222.1	2222.1	2224.4	2224.4	2220.9	2224.4	2224.4
7.5°	2244.4	2240.8	2244.4	2239.7	2237.3	2238.5	2239.7	2237.3	2235.0	2236.2	2236.2
10°	2270.2	2266.7	2266.7	2263.2	2259.6	2257.3	2254.9	2249.1	2243.2	2242.0	2237.3
12.5°	2300.7	2294.8	2291.3	2284.3	2278.4	2270.2	2263.2	2253.8	2242.0	2233.8	2225.6
15°	2331.2	2321.8	2313.6	2301.9	2289.0	2274.9	2259.6	2244.4	2225.6	2209.2	2195.1
17.5°	2355.9	2343.0	2327.7	2308.9	2290.2	2269.0	2246.7	2224.4	2197.4	2176.3	2159.9
20°	2364.1	2345.3	2325.4	2300.7	2276.1	2246.7	2218.6	2189.2	2158.7	2136.4	2117.6
22.5°	2353.6	2331.2	2306.6	2280.8	2247.9	2216.2	2183.3	2149.3	2122.3	2091.8	2074.2
25°	2324.2	2297.2	2270.2	2239.7	2208.0	2172.8	2137.6	2102.4	2069.5	2053.0	2030.7
27.5°	2264.3	2235.0	2205.6	2174.0	2137.6	2102.4	2066.0	2031.9	2003.7	1981.4	1968.5
30°	2158.7	2124.6	2090.6	2056.6	2024.9	1988.5	1954.4	1926.3	1898.1	1880.5	1867.6
32.5°	1996.7	1966.2	1932.1	1899.3	1869.9	1839.4	1811.2	1786.6	1766.6	1754.9	1745.5
35°	1778.4	1747.8	1722.0	1698.6	1673.9	1661.0	1643.4	1629.3	1621.1	1616.4	1615.2
37.5°	1503.7	1486.1	1477.9	1473.2	1468.5	1465.0	1467.3	1473.2	1477.9	1486.1	1495.5
40°	1210.2	1225.5	1230.2	1246.6	1261.9	1281.8	1304.1	1330.0	1351.1	1378.1	1396.9
42.5°	942.6	970.8	1003.6	1038.8	1076.4	1112.8	1157.4	1198.5	1236.0	1270.1	1299.4
45°	724.2	767.7	817.0	867.5	917.9	970.8	1024.8	1075.2	1119.8	1156.2	1186.8
47.5°	564.6	612.8	676.1	738.4	799.4	861.6	921.5	974.3	1011.8	1047.1	1074.1
50°	447.2	502.4	571.7	643.3	710.2	775.9	839.3	888.6	926.2	954.3	974.3
52.5°	346.3	412.0	482.4	557.6	629.2	700.8	759.5	805.2	835.8	860.4	875.7
55°	258.2	322.8	397.9	475.4	548.2	617.4	672.6	712.5	739.5	753.6	761.8
57.5°	186.6	245.3	320.4	397.9	463.7	529.4	574.0	610.4	625.6	633.9	637.4
60°	136.2	190.2	257.1	324.0	386.2	439.0	477.8	502.4	514.1	518.8	517.7
62.5°	99.8	146.7	204.2	260.6	311.1	354.5	385.0	401.4	407.3	409.7	406.2
65°	76.3	112.7	162.0	205.4	244.2	275.8	298.2	308.7	312.2	311.1	308.7
67.5°	56.4	84.5	120.9	153.8	182.0	206.6	218.3	227.7	230.1	226.6	223.0
70°	39.9	62.2	88.0	110.3	131.5	145.6	158.5	159.6	159.6	158.5	156.1
72.5°	28.2	43.4	59.9	75.1	88.0	98.6	103.3	106.8	105.6	104.5	102.1
75°	18.8	27.0	43.4	47.0	58.7	62.2	66.9	66.9	68.1	64.6	64.6
77.5°	11.7	18.8	25.8	30.5	35.2	39.9	42.3	42.3	43.4	42.3	42.3
80°	7.0	11.7	14.1	21.1	21.1	24.6	25.8	27.0	24.6	28.2	24.6
82.5°	4.7	7.0	10.6	10.6	12.9	15.3	15.3	16.4	16.4	15.3	15.3
85°	3.5	4.7	5.9	7.0	7.0	8.2	7.0	7.0	8.2	9.4	8.2
87.5°	1.2	2.4	1.2	2.4	2.4	4.7	3.5	3.5	3.5	4.7	4.7
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: P244216

CATALOG NUMBER: LSR8B40D010 EC8B40950 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2211.5	2211.5	2211.5	2211.5
2.5°	2213.8	2215.0	2213.8	2213.8
5°	2224.4	2223.2	2224.4	2222.1
7.5°	2232.6	2232.6	2231.5	2231.5
10°	2232.6	2228.0	2228.0	2228.0
12.5°	2215.0	2209.2	2205.6	2203.3
15°	2184.5	2174.0	2169.2	2168.1
17.5°	2144.6	2135.2	2129.3	2125.8
20°	2098.8	2089.4	2082.4	2083.6
22.5°	2058.9	2048.4	2043.6	2041.3
25°	2019.0	2006.1	2002.6	2000.2
27.5°	1954.4	1947.4	1943.9	1940.4
30°	1855.8	1852.3	1846.4	1854.7
32.5°	1742.0	1736.1	1731.4	1734.9
35°	1616.4	1612.8	1616.4	1614.0
37.5°	1501.3	1504.9	1509.6	1511.9
40°	1411.0	1423.9	1428.6	1430.9
42.5°	1320.6	1335.8	1345.2	1351.1
45°	1209.0	1224.3	1234.9	1241.9
47.5°	1094.0	1106.9	1117.5	1116.3
50°	989.6	996.6	1001.3	1006.0
52.5°	883.9	883.9	885.1	885.1
55°	764.2	761.8	760.6	761.8
57.5°	632.7	630.4	629.2	625.6
60°	513.0	505.9	501.2	501.2
62.5°	401.4	393.2	389.7	388.5
65°	301.7	300.5	293.5	292.3
67.5°	218.3	213.6	209.0	210.1
70°	153.8	146.7	146.7	144.4
72.5°	99.8	96.2	95.1	95.1
75°	62.2	62.2	59.9	64.6
77.5°	41.1	41.1	39.9	41.1
80°	24.6	24.6	24.6	23.5
82.5°	15.3	16.4	15.3	15.3
85°	8.2	9.4	7.0	10.6
87.5°	4.7	5.9	4.7	5.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)