

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: P245512

Luminaire Tested: **LSR8B40D010 EC8B40950 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245512  
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 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4146.0 lumens  
Efficiency: N/A  
Efficacy: 101.4 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

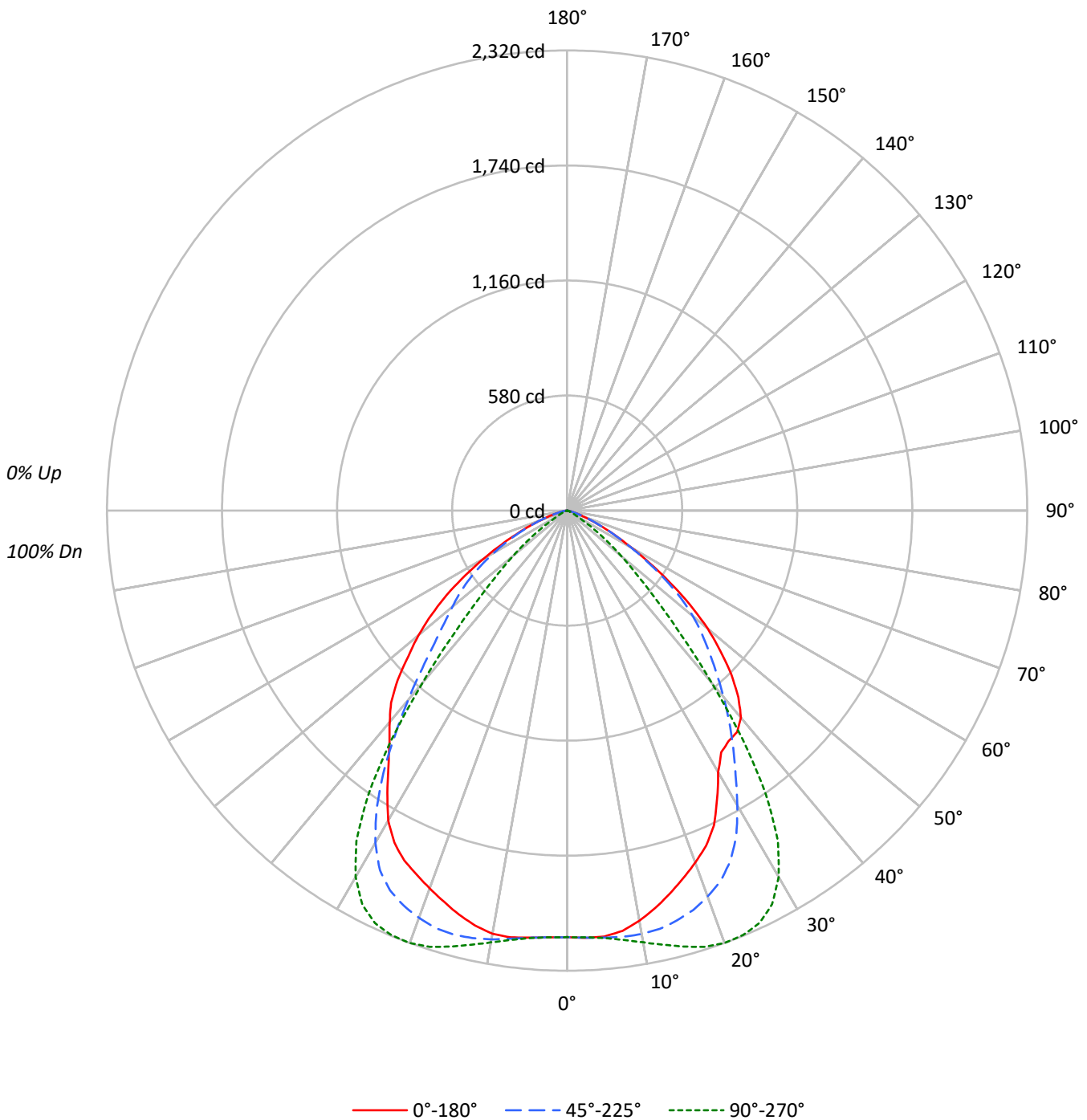
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	66323	66323	66323
5°	66718	66966	66895
10°	65736	69206	67847
15°	63816	72634	67315
20°	61965	76125	66497
25°	59583	78075	66187
30°	54225	75935	64227
35°	53417	65795	59090
40°	54870	45632	56017
45°	51079	27578	52671
50°	44308	17030	46937
55°	33999	8898	39832
60°	23164	3589	30065
65°	14411	1831	20744
70°	7826	1136	12658
75°	4075	548	7482
80°	1829	604	4049
85°	1203	389	3644



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.8	5.0
10°-20°	612.7	14.8
20°-30°	934.8	22.5
30°-40°	975.5	23.5
40°-50°	732.7	17.7
50°-60°	450.8	10.9
60°-70°	183.5	4.4
70°-80°	43.2	1.0
80°-90°	5.9	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°	1754.4	42.3
0°-40°	2729.8	65.8
0°-60°	3913.4	94.4
0°-90°	4146.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4146.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2151	2151	2151	2151	2151	
5°	2155	2161	2163	2161	2161	204
15°	1999	2139	2275	2212	2109	563
25°	1751	1948	2295	2113	1945	796
35°	1419	1459	1748	1615	1570	896
45°	1171	1014	632	944	1208	894
55°	632	600	166	600	741	569
65°	198	200	25	268	284	206
75°	34	34	5	60	63	41
85°	3	3	1	8	10	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°	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8
2.5°	2156.5	2153.1	2156.5	2156.5	2157.7	2155.4	2156.5	2157.7	2155.4	2155.4	2155.4
5°	2155.4	2153.1	2155.4	2154.2	2156.5	2156.5	2158.8	2158.8	2161.1	2161.1	2164.5
7.5°	2137.1	2132.6	2137.1	2140.5	2142.8	2147.4	2153.1	2157.7	2162.2	2166.8	2172.5
10°	2099.4	2099.4	2102.9	2109.7	2116.6	2124.5	2134.8	2146.2	2157.7	2167.9	2178.2
12.5°	2052.6	2049.2	2056.0	2065.2	2075.5	2088.0	2104.0	2121.1	2139.4	2159.9	2175.9
15°	1999.0	1995.5	2003.5	2012.7	2025.2	2043.5	2062.9	2085.7	2112.0	2139.4	2165.7
17.5°	1944.2	1943.0	1951.0	1963.6	1973.9	1993.3	2018.4	2045.8	2075.5	2112.0	2146.2
20°	1888.3	1887.1	1895.1	1905.4	1919.1	1937.3	1962.4	1994.4	2029.8	2070.9	2110.9
22.5°	1830.0	1831.2	1838.0	1849.4	1860.8	1880.2	1906.5	1938.5	1977.3	2021.8	2066.3
25°	1751.2	1745.5	1754.7	1766.1	1785.5	1801.5	1826.6	1860.8	1900.8	1947.6	2000.1
27.5°	1637.1	1635.9	1643.9	1654.2	1671.3	1690.7	1718.1	1753.5	1795.8	1847.1	1898.5
30°	1522.9	1525.2	1528.6	1538.9	1550.3	1569.7	1597.1	1626.8	1666.8	1715.8	1770.7
32.5°	1445.3	1445.3	1449.9	1456.7	1464.7	1475.0	1494.4	1516.1	1546.9	1581.1	1621.1
35°	1419.0	1414.5	1419.0	1420.2	1421.3	1423.6	1427.0	1433.9	1444.1	1459.0	1473.8
37.5°	1407.6	1404.2	1404.2	1399.6	1393.9	1387.1	1377.9	1367.7	1356.3	1341.4	1330.0
40°	1363.1	1360.8	1358.5	1354.0	1341.4	1327.7	1312.8	1288.9	1262.6	1226.1	1189.6
42.5°	1277.5	1275.2	1274.0	1264.9	1253.5	1237.5	1220.4	1195.3	1162.2	1115.4	1062.8
45°	1171.3	1166.7	1163.3	1155.3	1147.3	1133.6	1117.6	1094.8	1061.7	1013.8	951.0
47.5°	1048.0	1045.7	1044.6	1041.2	1033.2	1025.2	1014.9	996.6	966.9	921.3	856.2
50°	923.6	919.0	921.3	920.2	916.7	911.0	904.2	891.6	868.8	827.7	768.3
52.5°	780.9	780.9	779.7	783.1	784.3	783.1	784.3	770.6	751.2	720.4	670.1
55°	632.4	632.4	635.9	640.5	645.0	646.2	645.0	639.3	625.6	600.5	556.0
57.5°	493.2	490.9	497.7	504.6	509.2	513.7	510.3	505.7	497.7	477.2	442.9
60°	375.6	375.6	380.1	384.7	389.3	393.9	392.7	391.6	384.7	371.0	343.6
62.5°	276.3	277.4	277.4	280.8	285.4	290.0	293.4	290.0	286.5	277.4	259.1
65°	197.5	196.3	197.5	200.9	204.4	208.9	211.2	210.1	206.6	199.8	186.1
67.5°	132.4	131.3	135.8	137.0	139.3	143.9	142.7	143.9	142.7	137.0	125.6
70°	86.8	84.5	86.8	85.6	89.1	90.2	92.5	93.6	92.5	89.1	85.6
72.5°	53.7	52.5	53.7	54.8	56.0	57.1	59.4	59.4	58.2	56.0	51.4
75°	34.2	30.8	32.0	29.7	32.0	32.0	34.2	35.4	34.2	34.2	32.0
77.5°	20.6	20.6	20.6	20.6	20.6	20.6	20.6	21.7	22.8	20.6	19.4
80°	10.3	10.3	11.4	11.4	11.4	12.6	11.4	11.4	11.4	12.6	9.1
82.5°	8.0	6.8	6.8	6.8	8.0	6.8	6.8	6.8	6.8	6.8	6.8
85°	3.4	4.6	3.4	2.3	3.4	3.4	4.6	3.4	3.4	3.4	4.6
87.5°	1.1	1.1	0.0	0.0	0.0	1.1	0.0	1.1	1.1	2.3	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°	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8
2.5°	2156.5	2154.2	2154.2	2153.1	2155.4	2153.1	2154.2	2153.1	2153.1	2155.4	2153.1
5°	2164.5	2165.7	2163.4	2162.2	2165.7	2165.7	2165.7	2163.4	2163.4	2164.5	2163.4
7.5°	2175.9	2178.2	2179.3	2180.5	2182.8	2183.9	2183.9	2182.8	2181.6	2185.1	2180.5
10°	2188.5	2191.9	2198.8	2202.2	2207.9	2207.9	2210.2	2210.2	2207.9	2210.2	2209.0
12.5°	2183.9	2204.5	2215.9	2223.9	2231.9	2238.7	2241.0	2242.1	2241.0	2245.6	2241.0
15°	2191.9	2209.0	2227.3	2241.0	2255.8	2263.8	2266.1	2275.2	2277.5	2278.7	2271.8
17.5°	2179.3	2210.2	2229.6	2250.1	2271.8	2286.7	2300.4	2306.1	2307.2	2309.5	2300.4
20°	2150.8	2185.1	2214.7	2244.4	2269.5	2292.4	2303.8	2319.8	2315.2	2324.3	2311.8
22.5°	2112.0	2150.8	2188.5	2227.3	2253.6	2281.0	2304.9	2316.3	2322.1	2322.1	2308.3
25°	2050.3	2096.0	2137.1	2177.1	2217.0	2250.1	2277.5	2294.7	2298.1	2296.9	2281.0
27.5°	1954.5	2003.5	2051.5	2097.2	2146.2	2185.1	2217.0	2237.6	2243.3	2243.3	2226.2
30°	1822.0	1874.5	1921.4	1976.1	2026.4	2069.8	2114.3	2132.6	2142.8	2142.8	2123.4
32.5°	1664.5	1709.0	1752.4	1806.0	1860.8	1909.9	1952.2	1977.3	1989.8	1988.7	1971.6
35°	1493.2	1514.9	1548.0	1588.0	1637.1	1682.7	1723.8	1747.8	1769.5	1768.4	1752.4
37.5°	1322.0	1316.3	1319.7	1334.6	1365.4	1397.3	1429.3	1452.2	1470.4	1478.4	1475.0
40°	1154.2	1124.5	1095.9	1085.7	1088.0	1099.4	1116.5	1133.6	1154.2	1164.5	1169.0
42.5°	1003.5	953.3	903.0	865.4	843.6	836.8	844.8	850.5	863.1	877.9	892.8
45°	882.5	815.1	748.9	690.7	654.1	632.4	627.9	632.4	639.3	654.1	673.6
47.5°	783.1	704.4	630.2	565.1	511.4	482.9	474.9	472.6	479.5	493.2	519.4
50°	695.2	616.5	534.3	458.9	403.0	371.0	359.6	355.0	363.0	373.3	397.3
52.5°	599.3	521.7	437.2	364.2	306.0	272.9	260.3	253.4	258.0	271.7	295.7
55°	495.5	423.5	347.0	271.7	215.8	184.9	170.1	165.5	170.1	184.9	208.9
57.5°	391.6	331.1	267.1	196.3	146.1	115.3	100.4	95.9	108.5	114.2	139.3
60°	306.0	256.9	202.1	143.9	100.4	76.5	61.6	58.2	63.9	74.2	94.8
62.5°	229.5	198.6	155.3	102.7	74.2	49.1	41.1	37.7	41.1	49.1	65.1
65°	166.7	142.7	108.5	75.3	50.2	36.5	27.4	25.1	28.5	34.2	48.0
67.5°	114.2	95.9	75.3	52.5	34.2	22.8	19.4	19.4	20.6	25.1	35.4
70°	74.2	62.8	48.0	34.2	22.8	17.1	14.8	12.6	14.8	18.3	24.0
72.5°	46.8	39.9	30.8	24.0	17.1	12.6	10.3	9.1	11.4	13.7	18.3
75°	28.5	21.7	16.0	12.6	9.1	9.1	9.1	4.6	5.7	9.1	11.4
77.5°	17.1	14.8	12.6	10.3	8.0	4.6	4.6	4.6	5.7	6.8	10.3
80°	9.1	8.0	5.7	5.7	4.6	3.4	4.6	3.4	2.3	5.7	6.8
82.5°	5.7	4.6	4.6	4.6	5.7	2.3	3.4	2.3	3.4	4.6	3.4
85°	3.4	3.4	3.4	2.3	5.7	2.3	2.3	1.1	1.1	2.3	2.3
87.5°	0.0	1.1	1.1	0.0	1.1	0.0	1.1	1.1	1.1	1.1	1.1
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°	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8	2150.8
2.5°	2154.2	2153.1	2154.2	2153.1	2153.1	2153.1	2154.2	2154.2	2153.1	2153.1	2155.4
5°	2163.4	2163.4	2163.4	2162.2	2161.1	2161.1	2163.4	2163.4	2159.9	2163.4	2163.4
7.5°	2182.8	2179.3	2182.8	2178.2	2175.9	2177.1	2178.2	2175.9	2173.6	2174.8	2174.8
10°	2207.9	2204.5	2204.5	2201.1	2197.6	2195.3	2193.1	2187.3	2181.6	2180.5	2175.9
12.5°	2237.6	2231.9	2228.5	2221.6	2215.9	2207.9	2201.1	2191.9	2180.5	2172.5	2164.5
15°	2267.3	2258.1	2250.1	2238.7	2226.2	2212.4	2197.6	2182.8	2164.5	2148.5	2134.8
17.5°	2291.2	2278.7	2263.8	2245.6	2227.3	2206.7	2185.1	2163.4	2137.1	2116.6	2100.6
20°	2299.2	2281.0	2261.6	2237.6	2213.6	2185.1	2157.7	2129.1	2099.4	2077.8	2059.5
22.5°	2289.0	2267.3	2243.3	2218.2	2186.2	2155.4	2123.4	2090.3	2064.0	2034.4	2017.2
25°	2260.4	2234.2	2207.9	2178.2	2147.4	2113.1	2078.9	2044.7	2012.7	1996.7	1975.0
27.5°	2202.2	2173.6	2145.1	2114.3	2078.9	2044.7	2009.3	1976.1	1948.8	1927.1	1914.5
30°	2099.4	2066.3	2033.2	2000.1	1969.3	1933.9	1900.8	1873.4	1846.0	1828.9	1816.3
32.5°	1941.9	1912.2	1879.1	1847.1	1818.6	1788.9	1761.5	1737.5	1718.1	1706.7	1697.6
35°	1729.6	1699.9	1674.8	1651.9	1627.9	1615.4	1598.3	1584.6	1576.6	1572.0	1570.9
37.5°	1462.4	1445.3	1437.3	1432.7	1428.2	1424.7	1427.0	1432.7	1437.3	1445.3	1454.4
40°	1177.0	1191.8	1196.4	1212.4	1227.2	1246.6	1268.3	1293.5	1314.0	1340.3	1358.5
42.5°	916.7	944.1	976.1	1010.3	1046.9	1082.3	1125.6	1165.6	1202.1	1235.2	1263.8
45°	704.4	746.6	794.6	843.6	892.8	944.1	996.6	1045.7	1089.1	1124.5	1154.2
47.5°	549.1	595.9	657.6	718.1	777.4	838.0	896.2	947.5	984.1	1018.3	1044.6
50°	435.0	488.6	556.0	625.6	690.7	754.6	816.2	864.2	900.7	928.1	947.5
52.5°	336.8	400.7	469.2	542.3	611.9	681.6	738.6	783.1	812.8	836.8	851.6
55°	251.2	313.9	387.0	462.4	533.1	600.5	654.1	693.0	719.2	732.9	740.9
57.5°	181.5	238.6	311.7	387.0	450.9	514.9	558.3	593.6	608.5	616.5	619.9
60°	132.4	184.9	250.0	315.1	375.6	427.0	464.6	488.6	500.0	504.6	503.4
62.5°	97.0	142.7	198.6	253.4	302.5	344.8	374.4	390.4	396.2	398.4	395.0
65°	74.2	109.6	157.5	199.8	237.5	268.3	290.0	300.3	303.7	302.5	300.3
67.5°	54.8	82.2	117.6	149.6	177.0	200.9	212.4	221.5	223.7	220.3	216.9
70°	38.8	60.5	85.6	107.3	127.9	141.6	154.1	155.3	155.3	154.1	151.8
72.5°	27.4	42.2	58.2	73.1	85.6	95.9	100.4	103.9	102.7	101.6	99.3
75°	18.3	26.3	42.2	45.7	57.1	60.5	65.1	65.1	66.2	62.8	62.8
77.5°	11.4	18.3	25.1	29.7	34.2	38.8	41.1	41.1	42.2	41.1	41.1
80°	6.8	11.4	13.7	20.6	20.6	24.0	25.1	26.3	24.0	27.4	24.0
82.5°	4.6	6.8	10.3	10.3	12.6	14.8	14.8	16.0	16.0	14.8	14.8
85°	3.4	4.6	5.7	6.8	6.8	8.0	6.8	6.8	8.0	9.1	8.0
87.5°	1.1	2.3	1.1	2.3	2.3	4.6	3.4	3.4	3.4	4.6	4.6
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: P245512

CATALOG NUMBER: LSR8B40D010 EC8B40950 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2150.8	2150.8	2150.8	2150.8
2.5°	2153.1	2154.2	2153.1	2153.1
5°	2163.4	2162.2	2163.4	2161.1
7.5°	2171.4	2171.4	2170.2	2170.2
10°	2171.4	2166.8	2166.8	2166.8
12.5°	2154.2	2148.5	2145.1	2142.8
15°	2124.5	2114.3	2109.7	2108.6
17.5°	2085.7	2076.6	2070.9	2067.5
20°	2041.2	2032.1	2025.2	2026.4
22.5°	2002.4	1992.1	1987.6	1985.3
25°	1963.6	1951.0	1947.6	1945.3
27.5°	1900.8	1893.9	1890.5	1887.1
30°	1804.9	1801.5	1795.8	1803.8
32.5°	1694.2	1688.4	1683.9	1687.3
35°	1572.0	1568.6	1572.0	1569.7
37.5°	1460.1	1463.5	1468.1	1470.4
40°	1372.2	1384.8	1389.4	1391.6
42.5°	1284.3	1299.2	1308.3	1314.0
45°	1175.9	1190.7	1201.0	1207.8
47.5°	1064.0	1076.6	1086.8	1085.7
50°	962.4	969.2	973.8	978.4
52.5°	859.6	859.6	860.8	860.8
55°	743.2	740.9	739.8	740.9
57.5°	615.3	613.1	611.9	608.5
60°	498.9	492.0	487.5	487.5
62.5°	390.4	382.4	379.0	377.9
65°	293.4	292.2	285.4	284.3
67.5°	212.4	207.8	203.2	204.4
70°	149.6	142.7	142.7	140.4
72.5°	97.0	93.6	92.5	92.5
75°	60.5	60.5	58.2	62.8
77.5°	39.9	39.9	38.8	39.9
80°	24.0	24.0	24.0	22.8
82.5°	14.8	16.0	14.8	14.8
85°	8.0	9.1	6.8	10.3
87.5°	4.6	5.7	4.6	5.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)