

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: P246184

Luminaire Tested: **LSR8B40D010 EC8B40830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246184
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 EC8B40830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4242.0 lumens
Efficiency: N/A
Efficacy: 103.7 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

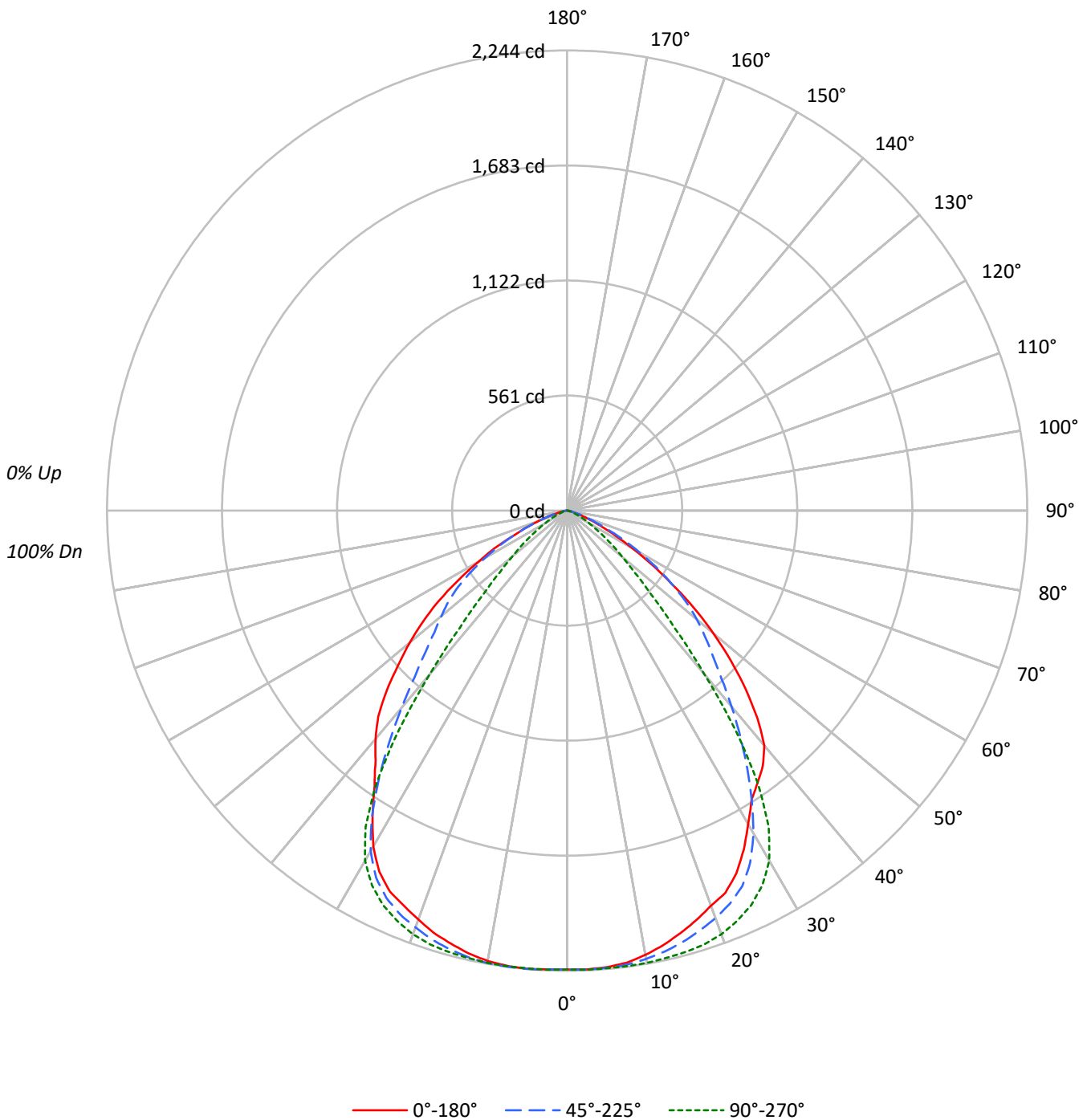
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	69018	69018	69018
5°	69167	69356	69430
10°	68877	70120	69820
15°	68113	71146	69802
20°	67298	72144	69621
25°	66422	72226	69695
30°	62839	70199	67332
35°	60965	61006	61642
40°	60208	41977	58517
45°	53648	25202	54381
50°	44610	16771	48069
55°	33456	11564	40757
60°	22671	7703	30750
65°	13674	4998	21123
70°	7582	2705	13001
75°	3431	1144	6732
80°	2983	1279	4688
85°	3397	1698	4670



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.6	5.0
10°-20°	620.3	14.6
20°-30°	941.5	22.2
30°-40°	988.9	23.3
40°-50°	741.4	17.5
50°-60°	475.7	11.2
60°-70°	203.5	4.8
70°-80°	48.1	1.1
80°-90°	8.9	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°	1775.5	41.9
0°-40°	2764.4	65.2
0°-60°	3981.5	93.9
0°-90°	4242.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4242.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2238	2238	2238	2238	2238	
5°	2234	2238	2241	2244	2243	212
15°	2134	2178	2229	2214	2186	602
25°	1952	2021	2123	2084	2048	892
35°	1620	1529	1621	1601	1638	1016
45°	1230	1006	578	977	1247	942
55°	622	622	215	649	758	564
65°	187	221	68	285	290	200
75°	29	34	10	58	56	42
85°	10	6	5	10	13	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°	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2
2.5°	2239.4	2241.8	2240.6	2240.6	2239.4	2240.6	2240.6	2243.0	2243.0	2240.6	2239.4
5°	2234.5	2237.0	2237.0	2234.5	2234.5	2240.6	2237.0	2239.4	2239.4	2238.2	2238.2
7.5°	2223.8	2223.8	2228.6	2225.0	2225.0	2228.6	2227.3	2229.8	2232.2	2233.4	2233.4
10°	2199.7	2202.1	2203.3	2203.3	2204.5	2208.1	2210.5	2215.4	2217.7	2220.1	2221.3
12.5°	2169.7	2173.3	2174.5	2173.3	2176.9	2181.7	2187.7	2193.7	2197.3	2202.1	2205.7
15°	2133.6	2133.6	2136.0	2139.7	2142.1	2149.3	2155.3	2162.5	2172.1	2178.1	2184.1
17.5°	2094.0	2096.4	2100.0	2100.0	2104.8	2116.8	2120.4	2131.2	2142.1	2148.1	2160.1
20°	2050.8	2053.1	2056.8	2059.2	2065.2	2074.8	2082.0	2091.6	2103.6	2114.4	2126.4
22.5°	2017.1	2012.3	2014.7	2017.1	2023.1	2031.5	2039.9	2051.9	2064.0	2074.8	2086.8
25°	1952.2	1953.4	1957.1	1959.4	1966.7	1973.9	1983.5	1997.9	2008.7	2020.7	2033.9
27.5°	1864.5	1865.7	1871.7	1871.7	1877.7	1889.8	1895.8	1907.8	1922.2	1934.2	1949.8
30°	1764.8	1767.2	1767.2	1772.0	1775.6	1781.6	1787.6	1799.7	1806.9	1817.7	1839.3
32.5°	1673.5	1675.9	1674.7	1673.5	1669.9	1668.7	1667.5	1669.9	1672.3	1675.9	1684.3
35°	1619.5	1613.4	1608.7	1600.2	1590.6	1578.6	1567.8	1553.4	1540.2	1529.3	1517.3
37.5°	1567.8	1566.6	1559.4	1547.4	1528.1	1506.5	1481.3	1450.1	1418.8	1385.2	1352.8
40°	1495.7	1492.1	1486.1	1469.3	1447.7	1421.2	1387.6	1349.1	1298.7	1247.0	1194.2
42.5°	1373.2	1374.4	1367.2	1353.9	1333.5	1308.3	1273.5	1231.4	1177.4	1116.1	1047.6
45°	1230.2	1230.2	1227.8	1217.0	1202.6	1182.2	1155.7	1120.9	1068.0	1005.5	932.3
47.5°	1081.2	1082.4	1078.8	1076.4	1070.4	1057.2	1038.0	1011.6	974.3	914.2	841.0
50°	929.9	929.9	935.9	934.7	934.7	929.9	921.5	905.8	873.4	825.3	756.9
52.5°	778.5	780.9	784.5	789.3	795.3	804.9	795.3	788.1	767.7	730.4	671.6
55°	622.3	624.7	630.7	639.1	646.4	656.0	658.3	658.3	647.5	622.3	577.9
57.5°	489.0	485.4	490.2	497.4	507.0	516.6	523.8	532.2	531.0	514.2	478.2
60°	367.6	368.8	372.4	379.6	386.8	395.3	404.9	412.1	415.7	407.3	384.4
62.5°	267.9	267.9	272.7	279.9	283.5	295.5	301.5	305.2	308.7	307.5	293.1
65°	187.4	189.8	192.2	195.8	199.4	206.6	210.2	217.4	219.9	221.1	210.2
67.5°	132.2	128.5	131.0	133.3	137.0	141.8	149.0	149.0	152.6	152.6	145.4
70°	84.1	84.1	85.3	88.9	91.3	92.5	94.9	97.3	100.9	99.7	99.7
72.5°	56.5	55.3	56.5	57.7	58.9	62.5	62.5	63.7	66.1	67.3	62.5
75°	28.8	30.0	32.4	31.2	34.8	32.4	33.6	37.2	36.0	33.6	33.6
77.5°	24.0	24.0	24.0	22.8	25.2	25.2	24.0	26.4	25.2	25.2	24.0
80°	16.8	18.0	16.8	15.6	16.8	15.6	15.6	15.6	15.6	15.6	14.4
82.5°	13.2	10.8	12.0	10.8	12.0	12.0	10.8	9.6	9.6	10.8	9.6
85°	9.6	7.2	8.4	8.4	7.2	7.2	7.2	7.2	7.2	6.0	6.0
87.5°	6.0	3.6	3.6	3.6	4.8	4.8	4.8	3.6	4.8	4.8	2.4
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°	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2
2.5°	2241.8	2240.6	2243.0	2241.8	2241.8	2240.6	2241.8	2240.6	2243.0	2238.2	2239.4
5°	2241.8	2239.4	2240.6	2241.8	2243.0	2240.6	2240.6	2240.6	2243.0	2240.6	2241.8
7.5°	2237.0	2235.8	2239.4	2241.8	2240.6	2239.4	2241.8	2240.6	2243.0	2241.8	2244.2
10°	2227.3	2228.6	2231.0	2234.5	2235.8	2237.0	2239.4	2239.4	2243.0	2238.2	2240.6
12.5°	2212.9	2217.7	2223.8	2226.1	2231.0	2231.0	2233.4	2234.5	2237.0	2235.8	2239.4
15°	2194.9	2200.9	2208.1	2214.1	2220.1	2223.8	2227.3	2228.6	2232.2	2228.6	2229.8
17.5°	2173.3	2180.5	2191.3	2198.5	2208.1	2211.7	2216.5	2218.9	2222.6	2220.1	2221.3
20°	2143.2	2151.7	2163.7	2174.5	2180.5	2188.9	2194.9	2198.5	2200.9	2198.5	2199.7
22.5°	2101.2	2113.2	2128.8	2137.2	2149.3	2156.5	2157.7	2166.1	2172.1	2166.1	2168.5
25°	2051.9	2064.0	2076.0	2094.0	2104.8	2113.2	2121.6	2122.8	2128.8	2127.6	2126.4
27.5°	1970.3	1985.9	2006.3	2020.7	2035.1	2048.4	2058.0	2060.3	2066.4	2064.0	2065.2
30°	1858.5	1875.4	1894.6	1917.4	1937.8	1951.0	1963.0	1971.5	1977.5	1973.9	1972.7
32.5°	1700.0	1716.8	1737.2	1760.0	1784.1	1803.3	1817.7	1828.5	1835.7	1833.3	1827.3
35°	1518.6	1523.3	1536.6	1554.6	1575.0	1595.4	1608.7	1620.6	1629.1	1631.5	1631.5
37.5°	1332.3	1316.7	1307.1	1307.1	1319.1	1327.5	1339.5	1346.7	1360.0	1364.8	1368.4
40°	1152.1	1116.1	1082.4	1057.2	1040.4	1039.2	1039.2	1042.8	1054.8	1070.4	1084.8
42.5°	991.1	933.5	881.8	835.0	801.3	782.1	773.7	774.9	784.5	798.9	822.9
45°	862.6	790.5	725.6	669.2	623.5	593.5	579.1	577.9	585.1	601.9	628.3
47.5°	762.9	686.0	612.7	547.8	498.6	466.1	449.3	444.5	449.3	464.9	496.2
50°	680.0	600.7	525.0	457.7	404.9	371.2	355.6	349.6	355.6	368.8	400.0
52.5°	603.1	521.4	450.5	385.6	329.2	300.3	283.5	279.9	283.5	299.1	324.4
55°	514.2	444.5	374.8	309.9	260.7	231.9	218.6	215.1	218.6	233.1	259.5
57.5°	426.5	366.4	305.2	246.3	204.2	179.0	167.0	162.2	170.6	180.2	211.4
60°	344.8	296.7	245.1	193.4	158.6	135.7	126.1	124.9	127.3	139.4	161.0
62.5°	270.3	230.7	189.8	147.8	118.9	109.3	97.3	96.1	98.5	105.7	122.6
65°	194.6	169.4	138.2	108.1	85.3	72.1	67.3	68.5	70.9	75.7	91.3
67.5°	135.7	117.7	96.1	75.7	58.9	52.9	48.1	46.9	48.1	56.5	64.9
70°	91.3	80.5	64.9	57.7	40.9	32.4	33.6	30.0	34.8	34.8	42.0
72.5°	60.1	52.9	43.2	33.6	28.8	22.8	22.8	21.6	24.0	25.2	31.2
75°	31.2	24.0	24.0	16.8	12.0	6.0	10.8	9.6	8.4	9.6	12.0
77.5°	21.6	18.0	16.8	13.2	12.0	9.6	9.6	9.6	9.6	10.8	12.0
80°	13.2	13.2	9.6	8.4	7.2	6.0	7.2	7.2	7.2	7.2	8.4
82.5°	8.4	7.2	7.2	6.0	6.0	4.8	4.8	4.8	4.8	4.8	7.2
85°	7.2	4.8	4.8	3.6	4.8	8.4	3.6	4.8	4.8	4.8	3.6
87.5°	2.4	3.6	3.6	3.6	2.4	1.2	2.4	3.6	3.6	6.0	4.8
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°	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2	2238.2
2.5°	2241.8	2243.0	2243.0	2241.8	2241.8	2239.4	2244.2	2240.6	2241.8	2246.6	2243.0
5°	2244.2	2245.4	2245.4	2244.2	2244.2	2244.2	2245.4	2245.4	2244.2	2243.0	2245.4
7.5°	2249.0	2247.8	2247.8	2245.4	2245.4	2243.0	2245.4	2241.8	2244.2	2241.8	2245.4
10°	2243.0	2244.2	2243.0	2241.8	2241.8	2240.6	2240.6	2237.0	2238.2	2234.5	2237.0
12.5°	2239.4	2238.2	2238.2	2235.8	2233.4	2231.0	2229.8	2226.1	2226.1	2217.7	2221.3
15°	2229.8	2231.0	2227.3	2222.6	2220.1	2214.1	2211.7	2206.9	2202.1	2196.1	2197.3
17.5°	2221.3	2217.7	2212.9	2208.1	2198.5	2193.7	2188.9	2181.7	2179.3	2172.1	2169.7
20°	2196.1	2193.7	2187.7	2179.3	2173.3	2162.5	2157.7	2150.5	2144.4	2137.2	2133.6
22.5°	2163.7	2161.3	2154.1	2145.7	2136.0	2131.2	2126.4	2113.2	2107.2	2100.0	2098.8
25°	2122.8	2119.2	2112.0	2102.4	2097.6	2084.4	2079.6	2070.0	2067.6	2060.3	2059.2
27.5°	2060.3	2055.6	2047.1	2035.1	2026.7	2018.3	2013.5	2006.3	2003.9	1996.7	1995.5
30°	1966.7	1960.6	1943.8	1939.0	1924.6	1916.2	1916.2	1906.6	1907.8	1903.0	1903.0
32.5°	1818.9	1809.3	1796.1	1786.4	1776.8	1772.0	1772.0	1768.4	1770.8	1770.8	1773.2
35°	1623.1	1609.9	1602.6	1596.6	1596.6	1601.4	1615.9	1619.5	1626.7	1632.7	1637.5
37.5°	1372.0	1370.8	1379.2	1386.4	1404.4	1424.8	1450.1	1471.7	1492.1	1506.5	1520.9
40°	1100.5	1130.5	1154.5	1188.2	1215.8	1255.4	1301.1	1338.3	1373.2	1398.4	1424.8
42.5°	859.0	897.4	947.9	997.1	1046.4	1100.5	1160.5	1212.2	1257.8	1292.7	1320.3
45°	669.2	722.0	783.3	845.8	909.4	976.7	1039.2	1092.1	1140.1	1176.2	1203.8
47.5°	539.4	597.1	666.8	735.2	807.3	878.2	947.9	993.5	1033.2	1062.0	1087.3
50°	445.7	507.0	580.3	658.3	730.4	801.3	861.4	905.8	938.3	963.5	979.1
52.5°	372.4	437.3	515.4	593.5	665.5	730.4	784.5	818.1	844.6	862.6	877.0
55°	307.5	370.0	443.3	516.6	587.5	648.7	693.2	718.4	738.8	749.7	758.1
57.5°	251.1	308.7	376.0	443.3	504.6	555.0	589.9	615.1	624.7	633.1	631.9
60°	197.0	251.1	312.4	370.0	422.9	463.7	489.0	503.4	510.6	514.2	511.8
62.5°	155.0	204.2	251.1	301.5	340.0	374.8	398.9	398.9	402.5	403.7	407.3
65°	115.3	152.6	193.4	230.7	261.9	284.7	298.0	301.5	306.4	305.2	302.7
67.5°	85.3	112.9	143.0	170.6	192.2	206.6	216.2	224.7	223.5	221.1	219.9
70°	58.9	76.9	103.3	120.1	135.7	150.2	152.6	153.8	155.0	156.2	153.8
72.5°	40.9	54.1	68.5	82.9	92.5	98.5	104.5	105.7	105.7	105.7	104.5
75°	20.4	27.6	40.9	46.9	55.3	57.7	62.5	62.5	66.1	61.3	60.1
77.5°	18.0	21.6	28.8	33.6	37.2	40.9	42.0	45.7	44.4	42.0	43.2
80°	10.8	13.2	18.0	20.4	25.2	26.4	27.6	28.8	27.6	28.8	28.8
82.5°	8.4	9.6	12.0	12.0	15.6	15.6	16.8	16.8	18.0	18.0	18.0
85°	4.8	8.4	7.2	14.4	9.6	9.6	12.0	14.4	12.0	12.0	14.4
87.5°	4.8	4.8	3.6	4.8	4.8	4.8	6.0	7.2	7.2	8.4	7.2
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: P246184

CATALOG NUMBER: LSR8B40D010 EC8B40830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2238.2	2238.2	2238.2	2238.2
2.5°	2241.8	2244.2	2240.6	2239.4
5°	2245.4	2245.4	2243.0	2243.0
7.5°	2245.4	2245.4	2241.8	2239.4
10°	2235.8	2235.8	2232.2	2229.8
12.5°	2217.7	2217.7	2216.5	2212.9
15°	2194.9	2194.9	2190.1	2186.5
17.5°	2163.7	2166.1	2160.1	2160.1
20°	2130.0	2128.8	2124.0	2121.6
22.5°	2095.2	2092.8	2091.6	2084.4
25°	2058.0	2055.6	2051.9	2048.4
27.5°	1994.3	1993.1	1989.5	1984.7
30°	1897.0	1895.8	1891.0	1891.0
32.5°	1770.8	1769.6	1764.8	1766.0
35°	1639.9	1644.7	1642.3	1637.5
37.5°	1530.5	1534.2	1536.6	1534.2
40°	1439.2	1450.1	1451.3	1453.7
42.5°	1341.9	1356.3	1361.2	1363.6
45°	1225.4	1238.6	1249.4	1247.0
47.5°	1106.5	1116.1	1125.7	1118.5
50°	992.3	998.3	1002.0	1002.0
52.5°	884.2	884.2	883.0	884.2
55°	760.5	760.5	755.7	758.1
57.5°	630.7	633.1	629.5	623.5
60°	510.6	504.6	502.2	498.6
62.5°	397.7	397.7	389.3	400.0
65°	298.0	294.3	290.7	289.5
67.5°	216.2	215.1	211.4	210.2
70°	152.6	147.8	146.6	144.2
72.5°	102.1	102.1	99.7	99.7
75°	62.5	56.5	55.3	56.5
77.5°	43.2	42.0	42.0	40.9
80°	28.8	27.6	30.0	26.4
82.5°	18.0	19.2	18.0	19.2
85°	12.0	14.4	13.2	13.2
87.5°	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)