

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: P245458

Luminaire Tested: **LSR8B40D010 EC8B40827 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245458
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 EC8B40827 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4218.0 lumens
Efficiency: N/A
Efficacy: 103.1 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

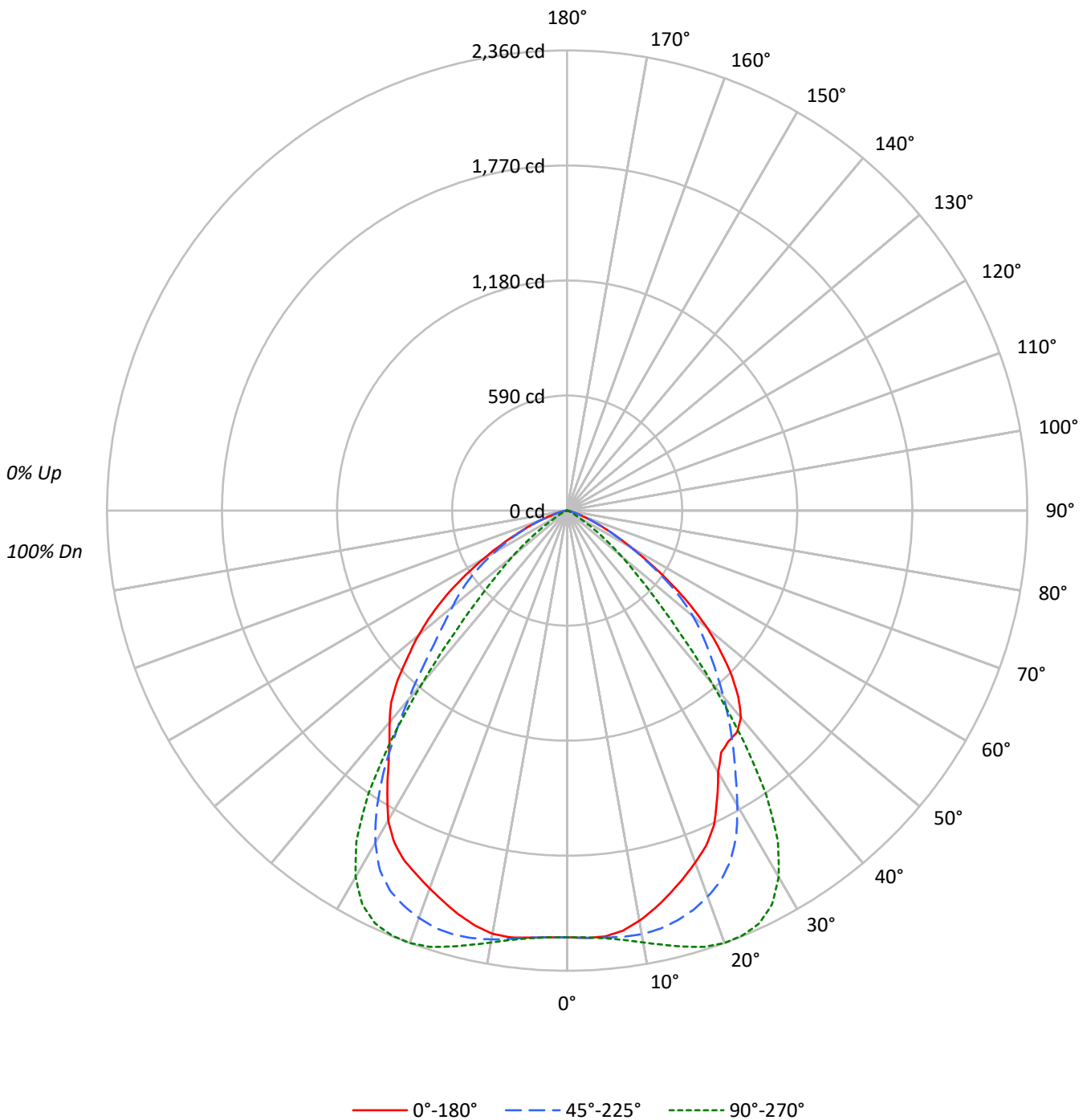
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	67473	67473	67473
5°	67876	68127	68056
10°	66879	70408	69024
15°	64924	73898	68484
20°	63038	77447	67652
25°	60617	79429	67337
30°	55169	77252	65342
35°	54347	66939	60118
40°	55824	46425	56992
45°	51965	28058	53587
50°	45075	17328	47752
55°	34590	9053	40525
60°	23565	3651	30583
65°	14659	1861	21101
70°	7961	1154	12884
75°	4146	548	7613
80°	1865	622	4120
85°	1238	425	3715



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.4	5.0
10°-20°	623.4	14.8
20°-30°	951.0	22.5
30°-40°	992.4	23.5
40°-50°	745.4	17.7
50°-60°	458.6	10.9
60°-70°	186.7	4.4
70°-80°	44.0	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°	1784.8	42.3
0°-40°	2777.2	65.8
0°-60°	3981.3	94.4
0°-90°	4218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4218.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2188	2188	2188	2188	2188	
5°	2193	2199	2201	2199	2199	207
15°	2034	2177	2315	2251	2145	573
25°	1782	1981	2334	2150	1979	810
35°	1444	1484	1778	1643	1597	912
45°	1192	1031	643	960	1229	909
55°	643	611	168	611	754	578
65°	201	203	26	273	289	210
75°	35	35	5	62	64	42
85°	4	4	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°	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1
2.5°	2194.0	2190.5	2194.0	2194.0	2195.1	2192.8	2194.0	2195.1	2192.8	2192.8	2192.8
5°	2192.8	2190.5	2192.8	2191.6	2194.0	2194.0	2196.3	2196.3	2198.6	2198.6	2202.1
7.5°	2174.2	2169.6	2174.2	2177.7	2180.0	2184.7	2190.5	2195.1	2199.8	2204.4	2210.2
10°	2135.9	2135.9	2139.4	2146.3	2153.3	2161.4	2171.9	2183.5	2195.1	2205.6	2216.0
12.5°	2088.3	2084.8	2091.8	2101.0	2111.5	2124.3	2140.5	2158.0	2176.6	2197.4	2213.7
15°	2033.7	2030.2	2038.3	2047.6	2060.4	2079.0	2098.7	2122.0	2148.7	2176.6	2203.3
17.5°	1977.9	1976.8	1984.9	1997.7	2008.1	2027.9	2053.4	2081.3	2111.5	2148.7	2183.5
20°	1921.0	1919.9	1928.0	1938.5	1952.4	1971.0	1996.5	2029.0	2065.0	2106.9	2147.5
22.5°	1861.8	1863.0	1869.9	1881.5	1893.2	1912.9	1939.6	1972.1	2011.6	2056.9	2102.2
25°	1781.6	1775.9	1785.1	1796.8	1816.5	1832.7	1858.3	1893.2	1933.8	1981.4	2034.9
27.5°	1665.5	1664.3	1672.5	1682.9	1700.3	1720.1	1748.0	1784.0	1826.9	1879.2	1931.5
30°	1549.4	1551.7	1555.2	1565.6	1577.2	1597.0	1624.9	1655.1	1695.7	1745.6	1801.4
32.5°	1470.4	1470.4	1475.0	1482.0	1490.1	1500.6	1520.3	1542.4	1573.8	1608.6	1649.2
35°	1443.7	1439.0	1443.7	1444.8	1446.0	1448.3	1451.8	1458.8	1469.2	1484.3	1499.4
37.5°	1432.1	1428.6	1428.6	1423.9	1418.1	1411.2	1401.9	1391.4	1379.8	1364.7	1353.1
40°	1386.8	1384.4	1382.1	1377.5	1364.7	1350.8	1335.6	1311.3	1284.6	1247.4	1210.2
42.5°	1299.7	1297.3	1296.2	1286.9	1275.3	1259.0	1241.6	1216.0	1182.4	1134.7	1081.3
45°	1191.6	1187.0	1183.5	1175.4	1167.2	1153.3	1137.1	1113.8	1080.1	1031.4	967.5
47.5°	1066.2	1063.9	1062.7	1059.2	1051.1	1043.0	1032.5	1013.9	983.7	937.3	871.1
50°	939.6	935.0	937.3	936.1	932.6	926.8	919.9	907.1	883.8	842.0	781.7
52.5°	794.4	794.4	793.3	796.7	797.9	796.7	797.9	784.0	764.2	732.9	681.8
55°	643.4	643.4	646.9	651.6	656.2	657.4	656.2	650.4	636.5	610.9	565.6
57.5°	501.7	499.4	506.4	513.4	518.0	522.6	519.2	514.5	506.4	485.5	450.6
60°	382.1	382.1	386.7	391.4	396.0	400.7	399.5	398.4	391.4	377.5	349.6
62.5°	281.1	282.2	282.2	285.7	290.4	295.0	298.5	295.0	291.5	282.2	263.6
65°	200.9	199.8	200.9	204.4	207.9	212.5	214.9	213.7	210.2	203.3	189.3
67.5°	134.7	133.6	138.2	139.4	141.7	146.4	145.2	146.4	145.2	139.4	127.8
70°	88.3	85.9	88.3	87.1	90.6	91.8	94.1	95.2	94.1	90.6	87.1
72.5°	54.6	53.4	54.6	55.8	56.9	58.1	60.4	60.4	59.2	56.9	52.3
75°	34.8	31.3	32.5	30.2	32.5	32.5	34.8	36.0	34.8	34.8	32.5
77.5°	20.9	20.9	20.9	20.9	20.9	20.9	20.9	22.1	23.2	20.9	19.8
80°	10.5	10.5	11.6	11.6	11.6	12.8	11.6	11.6	11.6	12.8	9.3
82.5°	8.1	7.0	7.0	7.0	8.1	7.0	7.0	7.0	7.0	7.0	7.0
85°	3.5	4.6	3.5	2.3	3.5	3.5	4.6	3.5	3.5	3.5	4.6
87.5°	1.2	1.2	0.0	0.0	0.0	1.2	0.0	1.2	1.2	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°	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1
2.5°	2194.0	2191.6	2191.6	2190.5	2192.8	2190.5	2191.6	2190.5	2190.5	2192.8	2190.5
5°	2202.1	2203.3	2200.9	2199.8	2203.3	2203.3	2203.3	2200.9	2200.9	2202.1	2200.9
7.5°	2213.7	2216.0	2217.2	2218.4	2220.7	2221.9	2221.9	2220.7	2219.5	2223.0	2218.4
10°	2226.5	2230.0	2236.9	2240.4	2246.2	2246.2	2248.6	2248.6	2246.2	2248.6	2247.4
12.5°	2221.9	2242.7	2254.4	2262.5	2270.6	2277.6	2279.9	2281.1	2279.9	2284.6	2279.9
15°	2230.0	2247.4	2266.0	2279.9	2295.0	2303.1	2305.5	2314.8	2317.1	2318.2	2311.3
17.5°	2217.2	2248.6	2268.3	2289.2	2311.3	2326.4	2340.3	2346.1	2347.3	2349.6	2340.3
20°	2188.1	2223.0	2253.2	2283.4	2309.0	2332.2	2343.8	2360.1	2355.4	2364.7	2351.9
22.5°	2148.7	2188.1	2226.5	2266.0	2292.7	2320.6	2345.0	2356.6	2362.4	2362.4	2348.4
25°	2086.0	2132.4	2174.2	2214.9	2255.5	2289.2	2317.1	2334.5	2338.0	2336.8	2320.6
27.5°	1988.4	2038.3	2087.1	2133.6	2183.5	2223.0	2255.5	2276.4	2282.2	2282.2	2264.8
30°	1853.7	1907.1	1954.7	2010.4	2061.6	2105.7	2151.0	2169.6	2180.0	2180.0	2160.3
32.5°	1693.4	1738.7	1782.8	1837.4	1893.2	1943.1	1986.1	2011.6	2024.4	2023.2	2005.8
35°	1519.2	1541.2	1574.9	1615.6	1665.5	1712.0	1753.8	1778.2	1800.2	1799.1	1782.8
37.5°	1344.9	1339.1	1342.6	1357.7	1389.1	1421.6	1454.1	1477.4	1495.9	1504.1	1500.6
40°	1174.2	1144.0	1115.0	1104.5	1106.8	1118.5	1135.9	1153.3	1174.2	1184.7	1189.3
42.5°	1020.9	969.8	918.7	880.4	858.3	851.3	859.5	865.3	878.1	893.1	908.3
45°	897.8	829.3	761.9	702.7	665.5	643.4	638.8	643.4	650.4	665.5	685.3
47.5°	796.7	716.6	641.1	574.9	520.3	491.3	483.2	480.8	487.8	501.7	528.4
50°	707.3	627.2	543.6	466.9	410.0	377.5	365.9	361.2	369.3	379.8	404.2
52.5°	609.8	530.8	444.8	370.5	311.3	277.6	264.8	257.8	262.5	276.4	300.8
55°	504.1	430.9	353.1	276.4	219.5	188.2	173.0	168.4	173.0	188.2	212.5
57.5°	398.4	336.8	271.8	199.8	148.7	117.3	102.2	97.6	110.3	116.1	141.7
60°	311.3	261.3	205.6	146.4	102.2	77.8	62.7	59.2	65.0	75.5	96.4
62.5°	233.5	202.1	158.0	104.5	75.5	49.9	41.8	38.3	41.8	49.9	66.2
65°	169.6	145.2	110.3	76.6	51.1	37.2	27.9	25.5	29.0	34.8	48.8
67.5°	116.1	97.6	76.6	53.4	34.8	23.2	19.8	19.8	20.9	25.5	36.0
70°	75.5	63.9	48.8	34.8	23.2	17.4	15.1	12.8	15.1	18.6	24.4
72.5°	47.6	40.6	31.3	24.4	17.4	12.8	10.5	9.3	11.6	13.9	18.6
75°	29.0	22.1	16.3	12.8	9.3	9.3	9.3	4.6	5.8	9.3	11.6
77.5°	17.4	15.1	12.8	10.5	8.1	4.6	4.6	4.6	5.8	7.0	10.5
80°	9.3	8.1	5.8	5.8	4.6	3.5	4.6	3.5	2.3	5.8	7.0
82.5°	5.8	4.6	4.6	4.6	5.8	2.3	3.5	2.3	3.5	4.6	3.5
85°	3.5	3.5	3.5	2.3	5.8	2.3	2.3	1.2	1.2	2.3	2.3
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°	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1	2188.1
2.5°	2191.6	2190.5	2191.6	2190.5	2190.5	2190.5	2191.6	2191.6	2190.5	2190.5	2192.8
5°	2200.9	2200.9	2200.9	2199.8	2198.6	2198.6	2200.9	2200.9	2197.4	2200.9	2200.9
7.5°	2220.7	2217.2	2220.7	2216.0	2213.7	2214.9	2216.0	2213.7	2211.4	2212.6	2212.6
10°	2246.2	2242.7	2242.7	2239.3	2235.8	2233.4	2231.1	2225.3	2219.5	2218.4	2213.7
12.5°	2276.4	2270.6	2267.2	2260.2	2254.4	2246.2	2239.3	2230.0	2218.4	2210.2	2202.1
15°	2306.6	2297.3	2289.2	2277.6	2264.8	2250.9	2235.8	2220.7	2202.1	2185.8	2171.9
17.5°	2331.0	2318.2	2303.1	2284.6	2266.0	2245.1	2223.0	2200.9	2174.2	2153.3	2137.1
20°	2339.1	2320.6	2300.8	2276.4	2252.0	2223.0	2195.1	2166.1	2135.9	2113.8	2095.2
22.5°	2328.7	2306.6	2282.2	2256.7	2224.2	2192.8	2160.3	2126.6	2099.9	2069.7	2052.3
25°	2299.7	2273.0	2246.2	2216.0	2184.7	2149.8	2115.0	2080.2	2047.6	2031.4	2009.3
27.5°	2240.4	2211.4	2182.4	2151.0	2115.0	2080.2	2044.2	2010.4	1982.6	1960.5	1947.8
30°	2135.9	2102.2	2068.5	2034.9	2003.5	1967.5	1933.8	1905.9	1878.0	1860.6	1847.9
32.5°	1975.6	1945.4	1911.7	1879.2	1850.2	1820.0	1792.1	1767.7	1748.0	1736.4	1727.1
35°	1759.6	1729.4	1703.8	1680.6	1656.2	1643.4	1626.0	1612.1	1603.9	1599.3	1598.1
37.5°	1487.8	1470.4	1462.3	1457.6	1453.0	1449.5	1451.8	1457.6	1462.3	1470.4	1479.7
40°	1197.4	1212.5	1217.2	1233.5	1248.5	1268.3	1290.4	1315.9	1336.8	1363.5	1382.1
42.5°	932.6	960.5	993.0	1027.9	1065.0	1101.1	1145.2	1185.8	1223.0	1256.7	1285.7
45°	716.6	759.6	808.4	858.3	908.3	960.5	1013.9	1063.9	1108.0	1144.0	1174.2
47.5°	558.7	606.3	669.0	730.6	790.9	852.5	911.7	964.0	1001.2	1036.0	1062.7
50°	442.5	497.1	565.6	636.5	702.7	767.7	830.4	879.2	916.4	944.3	964.0
52.5°	342.6	407.7	477.3	551.7	622.5	693.4	751.4	796.7	827.0	851.3	866.4
55°	255.5	319.4	393.7	470.4	542.4	610.9	665.5	705.0	731.7	745.6	753.8
57.5°	184.7	242.8	317.1	393.7	458.8	523.8	567.9	604.0	619.0	627.2	630.7
60°	134.7	188.2	254.3	320.6	382.1	434.4	472.7	497.1	508.7	513.4	512.2
62.5°	98.7	145.2	202.1	257.8	307.8	350.7	381.0	397.2	403.0	405.3	401.9
65°	75.5	111.5	160.3	203.3	241.6	272.9	295.0	305.5	308.9	307.8	305.5
67.5°	55.8	83.6	119.6	152.2	180.0	204.4	216.0	225.3	227.6	224.2	220.7
70°	39.5	61.6	87.1	109.2	130.1	144.0	156.8	158.0	158.0	156.8	154.5
72.5°	27.9	43.0	59.2	74.3	87.1	97.6	102.2	105.7	104.5	103.4	101.1
75°	18.6	26.7	43.0	46.5	58.1	61.6	66.2	66.2	67.4	63.9	63.9
77.5°	11.6	18.6	25.5	30.2	34.8	39.5	41.8	41.8	43.0	41.8	41.8
80°	7.0	11.6	13.9	20.9	20.9	24.4	25.5	26.7	24.4	27.9	24.4
82.5°	4.6	7.0	10.5	10.5	12.8	15.1	15.1	16.3	16.3	15.1	15.1
85°	3.5	4.6	5.8	7.0	7.0	8.1	7.0	7.0	8.1	9.3	8.1
87.5°	1.2	2.3	1.2	2.3	2.3	4.6	3.5	3.5	3.5	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: P245458

CATALOG NUMBER: LSR8B40D010 EC8B40827 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2188.1	2188.1	2188.1	2188.1
2.5°	2190.5	2191.6	2190.5	2190.5
5°	2200.9	2199.8	2200.9	2198.6
7.5°	2209.1	2209.1	2207.9	2207.9
10°	2209.1	2204.4	2204.4	2204.4
12.5°	2191.6	2185.8	2182.4	2180.0
15°	2161.4	2151.0	2146.3	2145.2
17.5°	2122.0	2112.7	2106.9	2103.4
20°	2076.7	2067.4	2060.4	2061.6
22.5°	2037.2	2026.7	2022.1	2019.7
25°	1997.7	1984.9	1981.4	1979.1
27.5°	1933.8	1926.8	1923.3	1919.9
30°	1836.2	1832.7	1826.9	1835.1
32.5°	1723.6	1717.8	1713.1	1716.6
35°	1599.3	1595.8	1599.3	1597.0
37.5°	1485.5	1489.0	1493.6	1495.9
40°	1396.1	1408.8	1413.5	1415.8
42.5°	1306.6	1321.7	1331.0	1336.8
45°	1196.3	1211.4	1221.8	1228.8
47.5°	1082.5	1095.3	1105.7	1104.5
50°	979.1	986.1	990.7	995.4
52.5°	874.6	874.6	875.7	875.7
55°	756.1	753.8	752.6	753.8
57.5°	626.0	623.7	622.5	619.0
60°	507.6	500.6	495.9	495.9
62.5°	397.2	389.1	385.6	384.4
65°	298.5	297.3	290.4	289.2
67.5°	216.0	211.4	206.7	207.9
70°	152.2	145.2	145.2	142.9
72.5°	98.7	95.2	94.1	94.1
75°	61.6	61.6	59.2	63.9
77.5°	40.6	40.6	39.5	40.6
80°	24.4	24.4	24.4	23.2
82.5°	15.1	16.3	15.1	15.1
85°	8.1	9.3	7.0	10.5
87.5°	4.6	5.8	4.6	5.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)