

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: P246190

Luminaire Tested: **LSR8B40D010 EC8B40835 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246190
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 EC8B40835 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4411.0 lumens
Efficiency: N/A
Efficacy: 107.8 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

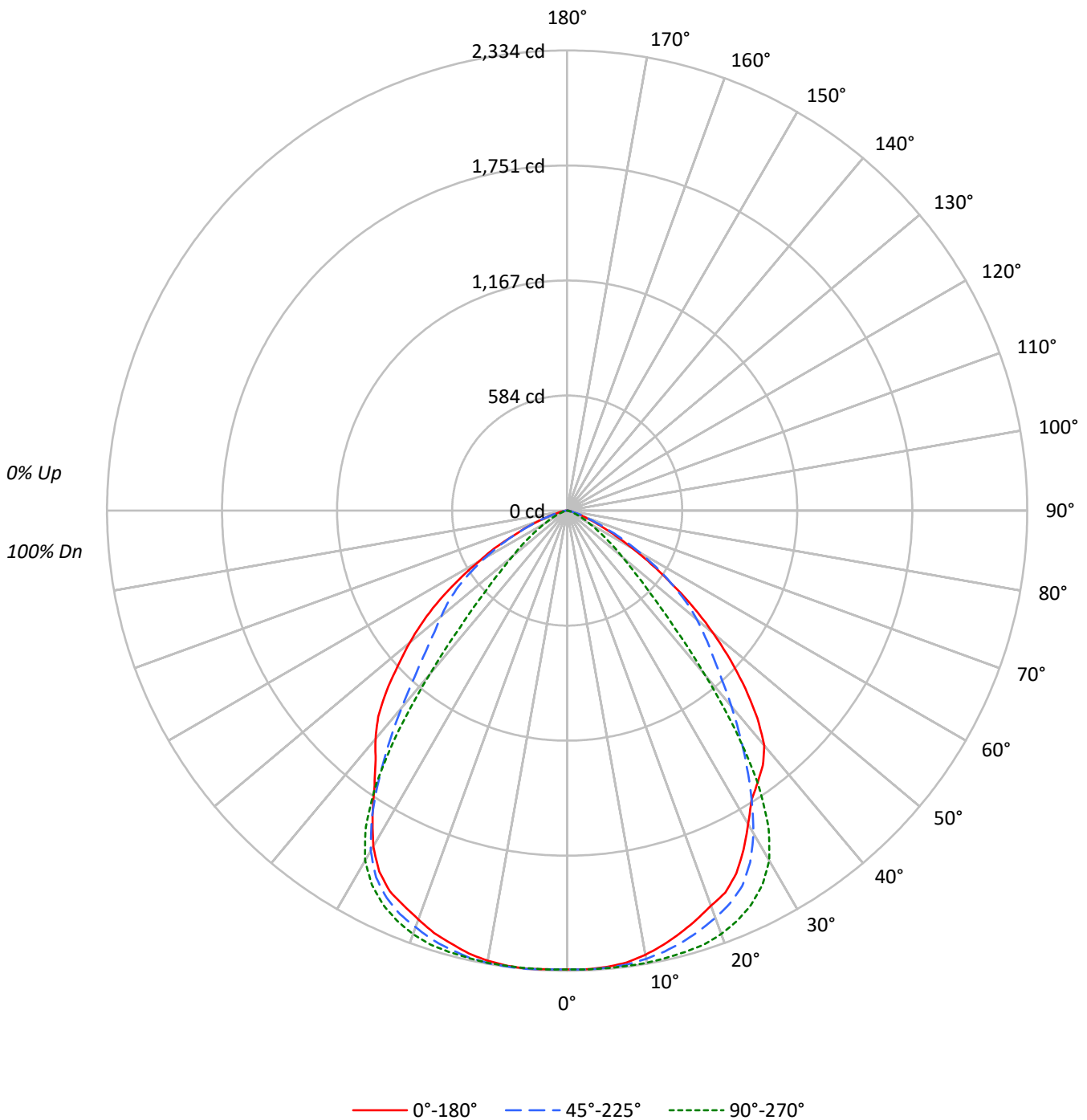
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	71765	71765	71765
5°	71925	72117	72194
10°	71620	72913	72600
15°	70827	73978	72583
20°	69979	75019	72397
25°	69069	75105	72471
30°	65342	72994	70013
35°	63393	63438	64097
40°	62607	43647	60848
45°	55785	26205	56548
50°	46385	17438	49983
55°	34789	12021	42380
60°	23577	8011	31971
65°	14221	5195	21970
70°	7889	2813	13515
75°	3574	1191	6994
80°	3108	1332	4883
85°	3538	1769	4883



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.1	5.0
10°-20°	645.0	14.6
20°-30°	979.0	22.2
30°-40°	1028.3	23.3
40°-50°	770.9	17.5
50°-60°	494.7	11.2
60°-70°	211.6	4.8
70°-80°	50.0	1.1
80°-90°	9.3	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°	1846.2	41.9
0°-40°	2874.5	65.2
0°-60°	4140.1	93.9
0°-90°	4411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4411.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2327	2327	2327	2327	2327	
5°	2324	2327	2330	2334	2332	221
15°	2219	2265	2317	2302	2274	626
25°	2030	2101	2207	2167	2130	927
35°	1684	1590	1685	1665	1703	1057
45°	1279	1046	601	1016	1297	980
55°	647	647	224	675	788	587
65°	195	230	71	296	301	208
75°	30	35	10	60	59	44
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°	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3
2.5°	2328.6	2331.1	2329.8	2329.8	2328.6	2329.8	2329.8	2332.3	2332.3	2329.8	2328.6
5°	2323.6	2326.1	2326.1	2323.6	2323.6	2329.8	2326.1	2328.6	2328.6	2327.3	2327.3
7.5°	2312.4	2312.4	2317.3	2313.6	2313.6	2317.3	2316.1	2318.6	2321.1	2322.3	2322.3
10°	2287.3	2289.9	2291.1	2291.1	2292.4	2296.1	2298.6	2303.6	2306.1	2308.6	2309.8
12.5°	2256.1	2259.9	2261.1	2259.9	2263.6	2268.6	2274.9	2281.1	2284.9	2289.9	2293.6
15°	2218.6	2218.6	2221.1	2224.9	2227.4	2234.9	2241.1	2248.6	2258.6	2264.9	2271.1
17.5°	2177.4	2179.9	2183.7	2183.7	2188.7	2201.2	2204.9	2216.2	2227.4	2233.6	2246.1
20°	2132.5	2134.9	2138.7	2141.2	2147.4	2157.4	2164.9	2174.9	2187.4	2198.7	2211.1
22.5°	2097.5	2092.5	2095.0	2097.5	2103.7	2112.5	2121.2	2133.7	2146.2	2157.4	2169.9
25°	2030.0	2031.3	2035.0	2037.5	2045.0	2052.5	2062.5	2077.5	2088.7	2101.2	2115.0
27.5°	1938.8	1940.1	1946.3	1946.3	1952.6	1965.1	1971.3	1983.8	1998.8	2011.3	2027.5
30°	1835.1	1837.6	1837.6	1842.6	1846.4	1852.6	1858.9	1871.4	1878.9	1890.1	1912.6
32.5°	1740.2	1742.7	1741.4	1740.2	1736.4	1735.2	1733.9	1736.4	1738.9	1742.7	1751.4
35°	1684.0	1677.7	1672.7	1664.0	1654.0	1641.5	1630.3	1615.3	1601.5	1590.3	1577.8
37.5°	1630.3	1629.0	1621.5	1609.0	1589.0	1566.6	1540.3	1507.8	1475.3	1440.4	1406.7
40°	1555.3	1551.5	1545.3	1527.8	1505.3	1477.8	1442.9	1402.9	1350.4	1296.7	1241.7
42.5°	1427.9	1429.1	1421.6	1407.9	1386.7	1360.4	1324.2	1280.5	1224.3	1160.5	1089.3
45°	1279.2	1279.2	1276.7	1265.5	1250.5	1229.2	1201.8	1165.5	1110.6	1045.6	969.4
47.5°	1124.3	1125.6	1121.8	1119.3	1113.1	1099.3	1079.3	1051.9	1013.1	950.7	874.5
50°	966.9	966.9	973.2	971.9	971.9	966.9	958.2	941.9	908.2	858.2	787.0
52.5°	809.5	812.0	815.8	820.8	827.0	837.0	827.0	819.5	798.3	759.5	698.3
55°	647.1	649.6	655.8	664.6	672.1	682.1	684.6	684.6	673.3	647.1	600.9
57.5°	508.4	504.7	509.7	517.2	527.2	537.2	544.7	553.4	552.2	534.7	497.2
60°	382.3	383.5	387.3	394.8	402.3	411.0	421.0	428.5	432.2	423.5	399.8
62.5°	278.6	278.6	283.6	291.1	294.8	307.3	313.6	317.3	321.0	319.8	304.8
65°	194.9	197.4	199.9	203.6	207.4	214.9	218.6	226.1	228.6	229.9	218.6
67.5°	137.4	133.7	136.2	138.7	142.4	147.4	154.9	154.9	158.6	158.6	151.2
70°	87.5	87.5	88.7	92.4	94.9	96.2	98.7	101.2	104.9	103.7	103.7
72.5°	58.7	57.5	58.7	60.0	61.2	65.0	65.0	66.2	68.7	70.0	65.0
75°	30.0	31.2	33.7	32.5	36.2	33.7	35.0	38.7	37.5	35.0	35.0
77.5°	25.0	25.0	25.0	23.7	26.2	26.2	25.0	27.5	26.2	26.2	25.0
80°	17.5	18.7	17.5	16.2	17.5	16.2	16.2	16.2	16.2	16.2	15.0
82.5°	13.8	11.2	12.5	11.2	12.5	12.5	11.2	10.0	10.0	11.2	10.0
85°	10.0	7.5	8.7	8.7	7.5	7.5	7.5	7.5	7.5	6.2	6.2
87.5°	6.2	3.8	3.8	3.8	5.0	5.0	5.0	3.8	5.0	5.0	2.5
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°	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3
2.5°	2331.1	2329.8	2332.3	2331.1	2331.1	2329.8	2331.1	2329.8	2332.3	2327.3	2328.6
5°	2331.1	2328.6	2329.8	2331.1	2332.3	2329.8	2329.8	2329.8	2332.3	2329.8	2331.1
7.5°	2326.1	2324.8	2328.6	2331.1	2329.8	2328.6	2331.1	2329.8	2332.3	2331.1	2333.6
10°	2316.1	2317.3	2319.8	2323.6	2324.8	2326.1	2328.6	2328.6	2332.3	2327.3	2329.8
12.5°	2301.1	2306.1	2312.4	2314.8	2319.8	2319.8	2322.3	2323.6	2326.1	2324.8	2328.6
15°	2282.4	2288.6	2296.1	2302.4	2308.6	2312.4	2316.1	2317.3	2321.1	2317.3	2318.6
17.5°	2259.9	2267.4	2278.6	2286.1	2296.1	2299.9	2304.8	2307.3	2311.1	2308.6	2309.8
20°	2228.6	2237.4	2249.9	2261.1	2267.4	2276.1	2282.4	2286.1	2288.6	2286.1	2287.3
22.5°	2184.9	2197.4	2213.7	2222.4	2234.9	2242.4	2243.6	2252.4	2258.6	2252.4	2254.9
25°	2133.7	2146.2	2158.7	2177.4	2188.7	2197.4	2206.2	2207.4	2213.7	2212.4	2211.1
27.5°	2048.7	2065.0	2086.2	2101.2	2116.2	2130.0	2140.0	2142.4	2148.7	2146.2	2147.4
30°	1932.6	1950.1	1970.1	1993.8	2015.0	2028.8	2041.3	2050.0	2056.2	2052.5	2051.3
32.5°	1767.7	1785.2	1806.4	1830.1	1855.1	1875.1	1890.1	1901.4	1908.8	1906.3	1900.1
35°	1579.1	1584.0	1597.8	1616.5	1637.7	1659.0	1672.7	1685.2	1694.0	1696.5	1696.5
37.5°	1385.4	1369.2	1359.2	1359.2	1371.7	1380.4	1392.9	1400.4	1414.1	1419.1	1422.9
40°	1198.0	1160.5	1125.6	1099.3	1081.9	1080.6	1080.6	1084.3	1096.8	1113.1	1128.1
42.5°	1030.6	970.7	916.9	868.2	833.3	813.3	804.5	805.8	815.8	830.7	855.7
45°	897.0	822.0	754.5	695.8	648.4	617.1	602.1	600.9	608.4	625.9	653.4
47.5°	793.3	713.3	637.1	569.6	518.4	484.7	467.2	462.2	467.2	483.4	515.9
50°	707.1	624.6	545.9	476.0	421.0	386.0	369.8	363.5	369.8	383.5	416.0
52.5°	627.1	542.2	468.5	401.0	342.3	312.3	294.8	291.1	294.8	311.0	337.3
55°	534.7	462.2	389.8	322.3	271.1	241.1	227.4	223.6	227.4	242.4	269.8
57.5°	443.5	381.0	317.3	256.1	212.4	186.1	173.7	168.6	177.4	187.4	219.9
60°	358.5	308.6	254.8	201.1	164.9	141.2	131.2	129.9	132.4	144.9	167.4
62.5°	281.1	239.9	197.4	153.7	123.7	113.7	101.2	100.0	102.4	109.9	127.4
65°	202.4	176.2	143.7	112.4	88.7	75.0	70.0	71.2	73.7	78.7	94.9
67.5°	141.2	122.4	100.0	78.7	61.2	55.0	50.0	48.7	50.0	58.7	67.5
70°	94.9	83.7	67.5	60.0	42.5	33.7	35.0	31.2	36.2	36.2	43.7
72.5°	62.4	55.0	45.0	35.0	30.0	23.7	23.7	22.5	25.0	26.2	32.5
75°	32.5	25.0	25.0	17.5	12.5	6.2	11.2	10.0	8.7	10.0	12.5
77.5°	22.5	18.7	17.5	13.8	12.5	10.0	10.0	10.0	10.0	11.2	12.5
80°	13.8	13.8	10.0	8.7	7.5	6.2	7.5	7.5	7.5	7.5	8.7
82.5°	8.7	7.5	7.5	6.2	6.2	5.0	5.0	5.0	5.0	5.0	7.5
85°	7.5	5.0	5.0	3.8	5.0	8.7	3.8	5.0	5.0	5.0	3.8
87.5°	2.5	3.8	3.8	3.8	2.5	1.3	2.5	3.8	3.8	6.2	5.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3	2327.3
2.5°	2331.1	2332.3	2332.3	2331.1	2331.1	2328.6	2333.6	2329.8	2331.1	2336.1	2332.3
5°	2333.6	2334.8	2334.8	2333.6	2333.6	2333.6	2334.8	2334.8	2333.6	2332.3	2334.8
7.5°	2338.6	2337.3	2337.3	2334.8	2334.8	2332.3	2334.8	2331.1	2333.6	2331.1	2334.8
10°	2332.3	2333.6	2332.3	2331.1	2331.1	2329.8	2329.8	2326.1	2327.3	2323.6	2326.1
12.5°	2328.6	2327.3	2327.3	2324.8	2322.3	2319.8	2318.6	2314.8	2314.8	2306.1	2309.8
15°	2318.6	2319.8	2316.1	2311.1	2308.6	2302.4	2299.9	2294.8	2289.9	2283.6	2284.9
17.5°	2309.8	2306.1	2301.1	2296.1	2286.1	2281.1	2276.1	2268.6	2266.1	2258.6	2256.1
20°	2283.6	2281.1	2274.9	2266.1	2259.9	2248.6	2243.6	2236.1	2229.9	2222.4	2218.6
22.5°	2249.9	2247.4	2239.9	2231.1	2221.1	2216.2	2211.1	2197.4	2191.2	2183.7	2182.4
25°	2207.4	2203.7	2196.2	2186.2	2181.2	2167.4	2162.4	2152.4	2150.0	2142.4	2141.2
27.5°	2142.4	2137.4	2128.7	2116.2	2107.5	2098.7	2093.7	2086.2	2083.7	2076.2	2075.0
30°	2045.0	2038.7	2021.3	2016.3	2001.3	1992.5	1992.5	1982.5	1983.8	1978.8	1978.8
32.5°	1891.4	1881.4	1867.6	1857.6	1847.6	1842.6	1842.6	1838.9	1841.4	1841.4	1843.9
35°	1687.7	1674.0	1666.5	1660.2	1660.2	1665.2	1680.2	1684.0	1691.5	1697.7	1702.7
37.5°	1426.6	1425.4	1434.1	1441.6	1460.4	1481.6	1507.8	1530.3	1551.5	1566.6	1581.5
40°	1144.3	1175.5	1200.5	1235.5	1264.2	1305.4	1352.9	1391.6	1427.9	1454.1	1481.6
42.5°	893.2	933.2	985.7	1036.9	1088.1	1144.3	1206.8	1260.5	1308.0	1344.2	1372.9
45°	695.8	750.8	814.5	879.5	945.7	1015.6	1080.6	1135.6	1185.5	1223.0	1251.7
47.5°	560.9	620.9	693.3	764.5	839.5	913.2	985.7	1033.1	1074.3	1104.3	1130.6
50°	463.5	527.2	603.4	684.6	759.5	833.3	895.7	941.9	975.7	1001.9	1018.1
52.5°	387.3	454.7	535.9	617.1	692.1	759.5	815.8	850.7	878.2	897.0	911.9
55°	319.8	384.8	461.0	537.2	610.9	674.6	720.8	747.1	768.3	779.5	788.3
57.5°	261.1	321.0	391.0	461.0	524.7	577.2	613.4	639.6	649.6	658.3	657.1
60°	204.9	261.1	324.8	384.8	439.7	482.2	508.4	523.4	530.9	534.7	532.2
62.5°	161.1	212.4	261.1	313.6	353.5	389.8	414.8	414.8	418.5	419.7	423.5
65°	119.9	158.6	201.1	239.9	272.3	296.1	309.8	313.6	318.6	317.3	314.8
67.5°	88.7	117.4	148.6	177.4	199.9	214.9	224.9	233.6	232.4	229.9	228.6
70°	61.2	80.0	107.4	124.9	141.2	156.2	158.6	159.9	161.1	162.4	159.9
72.5°	42.5	56.2	71.2	86.2	96.2	102.4	108.7	109.9	109.9	109.9	108.7
75°	21.2	28.7	42.5	48.7	57.5	60.0	65.0	65.0	68.7	63.7	62.4
77.5°	18.7	22.5	30.0	35.0	38.7	42.5	43.7	47.5	46.2	43.7	45.0
80°	11.2	13.8	18.7	21.2	26.2	27.5	28.7	30.0	28.7	30.0	30.0
82.5°	8.7	10.0	12.5	12.5	16.2	16.2	17.5	17.5	18.7	18.7	18.7
85°	5.0	8.7	7.5	15.0	10.0	10.0	12.5	15.0	12.5	12.5	15.0
87.5°	5.0	5.0	3.8	5.0	5.0	5.0	6.2	7.5	7.5	8.7	7.5
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: P246190

CATALOG NUMBER: LSR8B40D010 EC8B40835 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2327.3	2327.3	2327.3	2327.3
2.5°	2331.1	2333.6	2329.8	2328.6
5°	2334.8	2334.8	2332.3	2332.3
7.5°	2334.8	2334.8	2331.1	2328.6
10°	2324.8	2324.8	2321.1	2318.6
12.5°	2306.1	2306.1	2304.8	2301.1
15°	2282.4	2282.4	2277.4	2273.6
17.5°	2249.9	2252.4	2246.1	2246.1
20°	2214.9	2213.7	2208.7	2206.2
22.5°	2178.7	2176.2	2174.9	2167.4
25°	2140.0	2137.4	2133.7	2130.0
27.5°	2073.7	2072.5	2068.7	2063.8
30°	1972.5	1971.3	1966.3	1966.3
32.5°	1841.4	1840.1	1835.1	1836.4
35°	1705.2	1710.2	1707.7	1702.7
37.5°	1591.5	1595.3	1597.8	1595.3
40°	1496.6	1507.8	1509.1	1511.6
42.5°	1395.4	1410.4	1415.4	1417.9
45°	1274.2	1288.0	1299.2	1296.7
47.5°	1150.5	1160.5	1170.5	1163.0
50°	1031.9	1038.1	1041.9	1041.9
52.5°	919.5	919.5	918.2	919.5
55°	790.8	790.8	785.8	788.3
57.5°	655.8	658.3	654.6	648.4
60°	530.9	524.7	522.2	518.4
62.5°	413.5	413.5	404.8	416.0
65°	309.8	306.1	302.3	301.1
67.5°	224.9	223.6	219.9	218.6
70°	158.6	153.7	152.4	149.9
72.5°	106.2	106.2	103.7	103.7
75°	65.0	58.7	57.5	58.7
77.5°	45.0	43.7	43.7	42.5
80°	30.0	28.7	31.2	27.5
82.5°	18.7	20.0	18.7	20.0
85°	12.5	15.0	13.8	13.8
87.5°	7.5	7.5	7.5	7.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)