

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: P244606

Luminaire Tested: **LSR8B40D010 EC8B40835 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244606
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4461.0 lumens
Efficiency: N/A
Efficacy: 109.1 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

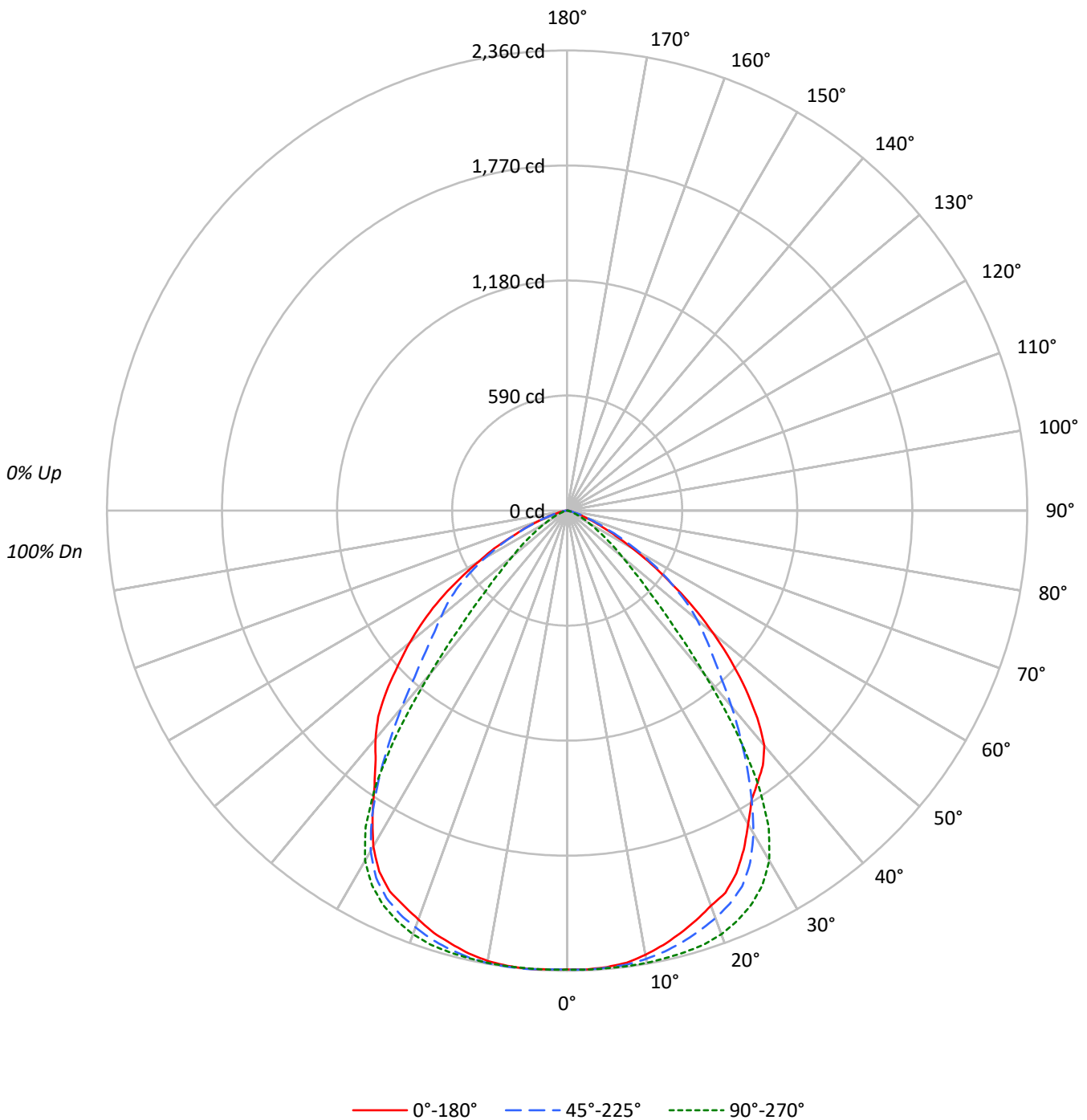
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	72579	72579	72579
5°	72739	72934	73015
10°	72434	73740	73424
15°	71631	74817	73406
20°	70770	75869	73218
25°	69851	75955	73291
30°	66082	73820	70808
35°	64112	64157	64823
40°	63315	44142	61536
45°	56417	26501	57189
50°	46913	17640	50549
55°	35182	12161	42859
60°	23843	8104	32335
65°	14381	5253	22218
70°	7970	2849	13668
75°	3610	1203	7077
80°	3143	1350	4937
85°	3573	1769	4918



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.6	5.0
10°-20°	652.4	14.6
20°-30°	990.1	22.2
30°-40°	1040.0	23.3
40°-50°	779.7	17.5
50°-60°	500.3	11.2
60°-70°	214.0	4.8
70°-80°	50.6	1.1
80°-90°	9.4	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°	1867.1	41.9
0°-40°	2907.1	65.2
0°-60°	4187.0	93.9
0°-90°	4461.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4461.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2354	2354	2354	2354	2354	
5°	2350	2354	2356	2360	2359	223
15°	2244	2291	2344	2328	2299	633
25°	2053	2125	2232	2192	2154	938
35°	1703	1608	1704	1684	1722	1069
45°	1294	1058	608	1027	1311	991
55°	654	654	226	682	797	594
65°	197	232	72	299	304	210
75°	30	35	10	61	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°	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7
2.5°	2355.0	2357.5	2356.2	2356.2	2355.0	2356.2	2356.2	2358.8	2358.8	2356.2	2355.0
5°	2349.9	2352.4	2352.4	2349.9	2349.9	2356.2	2352.4	2355.0	2355.0	2353.7	2353.7
7.5°	2338.6	2338.6	2343.6	2339.8	2339.8	2343.6	2342.3	2344.9	2347.4	2348.7	2348.7
10°	2313.3	2315.8	2317.1	2317.1	2318.3	2322.1	2324.7	2329.7	2332.2	2334.8	2336.0
12.5°	2281.7	2285.5	2286.8	2285.5	2289.3	2294.3	2300.7	2307.0	2310.8	2315.8	2319.6
15°	2243.8	2243.8	2246.3	2250.1	2252.7	2260.2	2266.5	2274.1	2284.2	2290.6	2296.9
17.5°	2202.1	2204.6	2208.4	2208.4	2213.5	2226.1	2229.9	2241.3	2252.7	2259.0	2271.6
20°	2156.6	2159.1	2162.9	2165.5	2171.8	2181.9	2189.5	2199.6	2212.2	2223.6	2236.2
22.5°	2121.2	2116.2	2118.7	2121.2	2127.6	2136.4	2145.3	2157.9	2170.5	2181.9	2194.5
25°	2053.0	2054.3	2058.1	2060.6	2068.2	2075.8	2085.9	2101.0	2112.4	2125.0	2138.9
27.5°	1960.8	1962.1	1968.4	1968.4	1974.7	1987.3	1993.6	2006.3	2021.5	2034.1	2050.5
30°	1855.9	1858.4	1858.4	1863.5	1867.3	1873.6	1879.9	1892.6	1900.2	1911.5	1934.3
32.5°	1759.9	1762.4	1761.2	1759.9	1756.1	1754.9	1753.6	1756.1	1758.7	1762.4	1771.3
35°	1703.1	1696.7	1691.7	1682.9	1672.8	1660.1	1648.7	1633.6	1619.7	1608.3	1595.7
37.5°	1648.7	1647.5	1639.9	1627.2	1607.0	1584.3	1557.8	1524.9	1492.1	1456.7	1422.6
40°	1572.9	1569.1	1562.8	1545.1	1522.4	1494.6	1459.2	1418.8	1365.7	1311.4	1255.8
42.5°	1444.1	1445.3	1437.7	1423.8	1402.4	1375.8	1339.2	1295.0	1238.1	1173.7	1101.7
45°	1293.7	1293.7	1291.2	1279.8	1264.7	1243.2	1215.4	1178.8	1123.2	1057.5	980.4
47.5°	1137.1	1138.3	1134.5	1132.0	1125.7	1111.8	1091.6	1063.8	1024.6	961.4	884.4
50°	977.9	977.9	984.2	982.9	982.9	977.9	969.0	952.6	918.5	868.0	796.0
52.5°	818.7	821.2	825.0	830.1	836.4	846.5	836.4	828.8	807.3	768.1	706.2
55°	654.4	657.0	663.3	672.1	679.7	689.8	692.3	692.3	681.0	654.4	607.7
57.5°	514.2	510.4	515.5	523.1	533.2	543.3	550.8	559.7	558.4	540.7	502.8
60°	386.6	387.9	391.6	399.2	406.8	415.7	425.8	433.3	437.1	428.3	404.3
62.5°	281.7	281.7	286.8	294.4	298.2	310.8	317.1	320.9	324.7	323.4	308.3
65°	197.1	199.6	202.1	205.9	209.7	217.3	221.1	228.7	231.2	232.5	221.1
67.5°	139.0	135.2	137.7	140.2	144.0	149.1	156.7	156.7	160.4	160.4	152.9
70°	88.4	88.4	89.7	93.5	96.0	97.3	99.8	102.3	106.1	104.9	104.9
72.5°	59.4	58.1	59.4	60.7	61.9	65.7	65.7	67.0	69.5	70.8	65.7
75°	30.3	31.6	34.1	32.9	36.6	34.1	35.4	39.2	37.9	35.4	35.4
77.5°	25.3	25.3	25.3	24.0	26.5	26.5	25.3	27.8	26.5	26.5	25.3
80°	17.7	18.9	17.7	16.4	17.7	16.4	16.4	16.4	16.4	16.4	15.1
82.5°	13.9	11.4	12.6	11.4	12.6	12.6	11.4	10.1	10.1	11.4	10.1
85°	10.1	7.6	8.8	8.8	7.6	7.6	7.6	7.6	7.6	6.3	6.3
87.5°	6.3	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°	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7
2.5°	2357.5	2356.2	2358.8	2357.5	2357.5	2356.2	2357.5	2356.2	2358.8	2353.7	2355.0
5°	2357.5	2355.0	2356.2	2357.5	2358.8	2356.2	2356.2	2356.2	2358.8	2356.2	2357.5
7.5°	2352.4	2351.2	2355.0	2357.5	2356.2	2355.0	2357.5	2356.2	2358.8	2357.5	2360.0
10°	2342.3	2343.6	2346.1	2349.9	2351.2	2352.4	2355.0	2355.0	2358.8	2353.7	2356.2
12.5°	2327.2	2332.2	2338.6	2341.1	2346.1	2346.1	2348.7	2349.9	2352.4	2351.2	2355.0
15°	2308.2	2314.5	2322.1	2328.5	2334.8	2338.6	2342.3	2343.6	2347.4	2343.6	2344.9
17.5°	2285.5	2293.1	2304.4	2312.0	2322.1	2325.9	2331.0	2333.5	2337.3	2334.8	2336.0
20°	2253.9	2262.8	2275.4	2286.8	2293.1	2301.9	2308.2	2312.0	2314.5	2312.0	2313.3
22.5°	2209.7	2222.3	2238.7	2247.6	2260.2	2267.8	2269.1	2277.9	2284.2	2277.9	2280.4
25°	2157.9	2170.5	2183.2	2202.1	2213.5	2222.3	2231.2	2232.4	2238.7	2237.5	2236.2
27.5°	2072.0	2088.4	2109.9	2125.0	2140.2	2154.1	2164.2	2166.7	2173.1	2170.5	2171.8
30°	1954.5	1972.2	1992.4	2016.4	2037.9	2051.8	2064.4	2073.2	2079.5	2075.8	2074.5
32.5°	1787.7	1805.4	1826.9	1850.9	1876.2	1896.3	1911.5	1922.9	1930.5	1927.9	1921.6
35°	1597.0	1602.0	1615.9	1634.9	1656.3	1677.8	1691.7	1704.3	1713.2	1715.7	1715.7
37.5°	1401.1	1384.7	1374.6	1374.6	1387.2	1396.0	1408.7	1416.3	1430.2	1435.2	1439.0
40°	1211.6	1173.7	1138.3	1111.8	1094.1	1092.8	1092.8	1096.6	1109.3	1125.7	1140.9
42.5°	1042.3	981.7	927.3	878.1	842.7	822.5	813.6	814.9	825.0	840.2	865.4
45°	907.1	831.3	763.1	703.7	655.7	624.1	609.0	607.7	615.3	633.0	660.8
47.5°	802.3	721.4	644.3	576.1	524.3	490.2	472.5	467.5	472.5	488.9	521.8
50°	715.1	631.7	552.1	481.4	425.8	390.4	374.0	367.7	374.0	387.9	420.7
52.5°	634.2	548.3	473.8	405.6	346.2	315.8	298.2	294.4	298.2	314.6	341.1
55°	540.7	467.5	394.2	326.0	274.2	243.8	229.9	226.2	229.9	245.1	272.9
57.5°	448.5	385.3	320.9	259.0	214.8	188.2	175.6	170.5	179.4	189.5	222.4
60°	362.6	312.1	257.7	203.4	166.8	142.8	132.6	131.4	133.9	146.6	169.3
62.5°	284.3	242.6	199.6	155.4	125.1	115.0	102.3	101.1	103.6	111.2	128.9
65°	204.7	178.2	145.3	113.7	89.7	75.8	70.8	72.0	74.5	79.6	96.0
67.5°	142.8	123.8	101.1	79.6	61.9	55.6	50.5	49.3	50.5	59.4	68.2
70°	96.0	84.6	68.2	60.7	43.0	34.1	35.4	31.6	36.6	36.6	44.2
72.5°	63.2	55.6	45.5	35.4	30.3	24.0	24.0	22.8	25.3	26.5	32.9
75°	32.9	25.3	25.3	17.7	12.6	6.3	11.4	10.1	8.8	10.1	12.6
77.5°	22.8	18.9	17.7	13.9	12.6	10.1	10.1	10.1	10.1	11.4	12.6
80°	13.9	13.9	10.1	8.8	7.6	6.3	7.6	7.6	7.6	7.6	8.8
82.5°	8.8	7.6	7.6	6.3	6.3	5.0	5.0	5.0	5.0	5.0	7.6
85°	7.6	5.0	5.0	3.8	5.0	8.8	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	6.3	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°	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7	2353.7
2.5°	2357.5	2358.8	2358.8	2357.5	2357.5	2355.0	2360.0	2356.2	2357.5	2362.6	2358.8
5°	2360.0	2361.3	2361.3	2360.0	2360.0	2360.0	2361.3	2361.3	2360.0	2358.8	2361.3
7.5°	2365.1	2363.8	2363.8	2361.3	2361.3	2358.8	2361.3	2357.5	2360.0	2357.5	2361.3
10°	2358.8	2360.0	2358.8	2357.5	2357.5	2356.2	2356.2	2352.4	2353.7	2349.9	2352.4
12.5°	2355.0	2353.7	2353.7	2351.2	2348.7	2346.1	2344.9	2341.1	2341.1	2332.2	2336.0
15°	2344.9	2346.1	2342.3	2337.3	2334.8	2328.5	2325.9	2320.9	2315.8	2309.5	2310.8
17.5°	2336.0	2332.2	2327.2	2322.1	2312.0	2307.0	2301.9	2294.3	2291.8	2284.2	2281.7
20°	2309.5	2307.0	2300.7	2291.8	2285.5	2274.1	2269.1	2261.5	2255.2	2247.6	2243.8
22.5°	2275.4	2272.8	2265.3	2256.4	2246.3	2241.3	2236.2	2222.3	2216.0	2208.4	2207.2
25°	2232.4	2228.6	2221.1	2211.0	2205.9	2192.0	2186.9	2176.8	2174.3	2166.7	2165.5
27.5°	2166.7	2161.7	2152.8	2140.2	2131.4	2122.5	2117.5	2109.9	2107.4	2099.8	2098.5
30°	2068.2	2061.9	2044.2	2039.1	2024.0	2015.1	2015.1	2005.0	2006.3	2001.2	2001.2
32.5°	1912.8	1902.7	1888.8	1878.7	1868.6	1863.5	1863.5	1859.7	1862.3	1862.3	1864.8
35°	1706.8	1693.0	1685.4	1679.1	1679.1	1684.1	1699.3	1703.1	1710.7	1717.0	1722.0
37.5°	1442.8	1441.6	1450.4	1458.0	1476.9	1498.4	1524.9	1547.7	1569.1	1584.3	1599.5
40°	1157.3	1188.9	1214.1	1249.5	1278.5	1320.2	1368.3	1407.4	1444.1	1470.6	1498.4
42.5°	903.3	943.8	996.8	1048.6	1100.4	1157.3	1220.5	1274.8	1322.8	1359.4	1388.5
45°	703.7	759.3	823.7	889.4	956.4	1027.2	1092.8	1148.4	1199.0	1236.9	1265.9
47.5°	567.3	627.9	701.2	773.2	849.0	923.5	996.8	1044.8	1086.5	1116.8	1143.4
50°	468.7	533.2	610.2	692.3	768.1	842.7	905.9	952.6	986.7	1013.2	1029.7
52.5°	391.6	459.9	542.0	624.1	699.9	768.1	825.0	860.4	888.2	907.1	922.3
55°	323.4	389.1	466.2	543.3	617.8	682.2	729.0	755.5	777.0	788.4	797.2
57.5°	264.1	324.7	395.4	466.2	530.6	583.7	620.3	646.9	657.0	665.8	664.5
60°	207.2	264.1	328.5	389.1	444.7	487.7	514.2	529.4	536.9	540.7	538.2
62.5°	163.0	214.8	264.1	317.1	357.5	394.2	419.5	419.5	423.2	424.5	428.3
65°	121.3	160.4	203.4	242.6	275.4	299.4	313.3	317.1	322.2	320.9	318.4
67.5°	89.7	118.8	150.3	179.4	202.1	217.3	227.4	236.3	235.0	232.5	231.2
70°	61.9	80.9	108.7	126.3	142.8	157.9	160.4	161.7	163.0	164.2	161.7
72.5°	43.0	56.8	72.0	87.2	97.3	103.6	109.9	111.2	111.2	111.2	109.9
75°	21.5	29.1	43.0	49.3	58.1	60.7	65.7	65.7	69.5	64.4	63.2
77.5°	18.9	22.8	30.3	35.4	39.2	43.0	44.2	48.0	46.7	44.2	45.5
80°	11.4	13.9	18.9	21.5	26.5	27.8	29.1	30.3	29.1	30.3	30.3
82.5°	8.8	10.1	12.6	12.6	16.4	16.4	17.7	17.7	18.9	18.9	18.9
85°	5.0	8.8	7.6	15.1	10.1	10.1	12.6	15.1	12.6	12.6	15.1
87.5°	5.0	5.0	3.8	5.0	5.0	5.0	6.3	7.6	7.6	8.8	7.6
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: P244606

CATALOG NUMBER: LSR8B40D010 EC8B40835 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2353.7	2353.7	2353.7	2353.7
2.5°	2357.5	2360.0	2356.2	2355.0
5°	2361.3	2361.3	2358.8	2358.8
7.5°	2361.3	2361.3	2357.5	2355.0
10°	2351.2	2351.2	2347.4	2344.9
12.5°	2332.2	2332.2	2331.0	2327.2
15°	2308.2	2308.2	2303.2	2299.4
17.5°	2275.4	2277.9	2271.6	2271.6
20°	2240.0	2238.7	2233.7	2231.2
22.5°	2203.4	2200.8	2199.6	2192.0
25°	2164.2	2161.7	2157.9	2154.1
27.5°	2097.3	2096.0	2092.2	2087.1
30°	1994.9	1993.6	1988.6	1988.6
32.5°	1862.3	1861.0	1855.9	1857.2
35°	1724.5	1729.6	1727.1	1722.0
37.5°	1609.6	1613.4	1615.9	1613.4
40°	1513.5	1524.9	1526.2	1528.7
42.5°	1411.2	1426.4	1431.4	1433.9
45°	1288.7	1302.6	1313.9	1311.4
47.5°	1163.6	1173.7	1183.8	1176.2
50°	1043.6	1049.9	1053.7	1053.7
52.5°	929.9	929.9	928.6	929.9
55°	799.7	799.7	794.7	797.2
57.5°	663.3	665.8	662.0	655.7
60°	536.9	530.6	528.1	524.3
62.5°	418.2	418.2	409.4	420.7
65°	313.3	309.5	305.7	304.5
67.5°	227.4	226.2	222.4	221.1
70°	160.4	155.4	154.1	151.6
72.5°	107.4	107.4	104.9	104.9
75°	65.7	59.4	58.1	59.4
77.5°	45.5	44.2	44.2	43.0
80°	30.3	29.1	31.6	27.8
82.5°	18.9	20.2	18.9	20.2
85°	12.6	15.1	13.9	13.9
87.5°	7.6	7.6	7.6	7.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)