

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: P246058

Luminaire Tested: **LSR8B40D010 EC8B40850 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246058
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 EC8B40850 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4417.0 lumens
Efficiency: N/A
Efficacy: 108.0 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

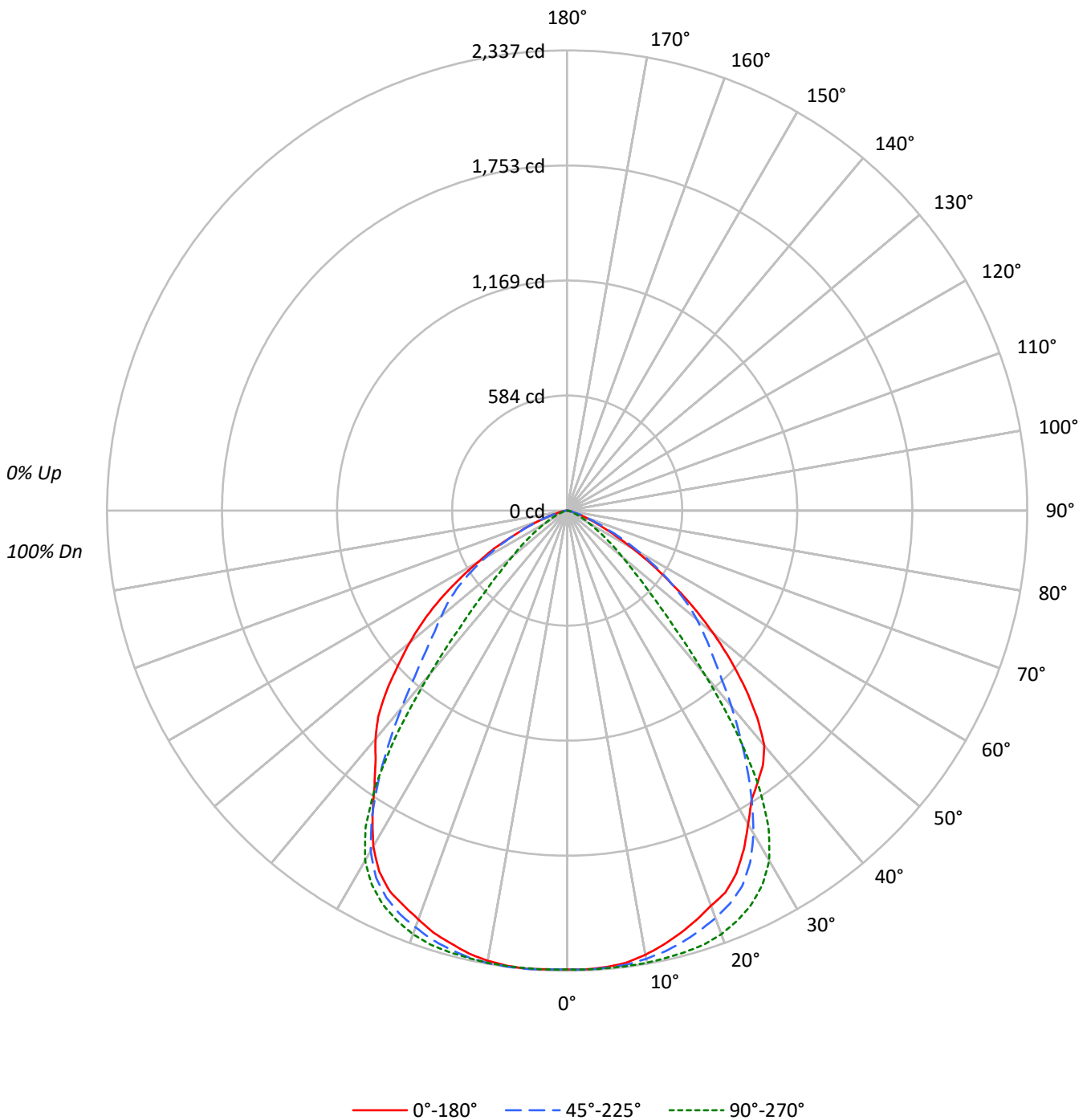
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	71864	71864	71864
5°	72021	72216	72293
10°	71720	73013	72697
15°	70926	74080	72682
20°	70074	75121	72496
25°	69164	75207	72570
30°	65431	73093	70110
35°	63479	63525	64183
40°	62692	43708	60928
45°	55863	26240	56626
50°	46447	17462	50050
55°	34837	12037	42434
60°	23608	8024	32014
65°	14243	5202	21999
70°	7898	2822	13533
75°	3574	1191	7006
80°	3108	1332	4883
85°	3538	1769	4883



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.4	5.0
10°-20°	645.9	14.6
20°-30°	980.4	22.2
30°-40°	1029.7	23.3
40°-50°	772.0	17.5
50°-60°	495.3	11.2
60°-70°	211.9	4.8
70°-80°	50.1	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°	1848.7	41.9
0°-40°	2878.4	65.2
0°-60°	4145.7	93.9
0°-90°	4417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4417.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2330	2330	2330	2330	2330	
5°	2327	2330	2333	2337	2336	221
15°	2222	2268	2320	2306	2277	627
25°	2033	2104	2210	2170	2133	929
35°	1686	1592	1688	1668	1705	1058
45°	1281	1047	602	1017	1298	981
55°	648	648	224	676	789	588
65°	195	230	71	296	302	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°	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2331.8	2334.3	2333.0	2333.0	2331.8	2333.0	2333.0	2335.5	2335.5	2333.0	2331.8
5°	2326.7	2329.2	2329.2	2326.7	2326.7	2333.0	2329.2	2331.8	2331.8	2330.5	2330.5
7.5°	2315.5	2315.5	2320.5	2316.8	2316.8	2320.5	2319.2	2321.7	2324.3	2325.5	2325.5
10°	2290.5	2293.0	2294.2	2294.2	2295.5	2299.2	2301.7	2306.7	2309.2	2311.7	2313.0
12.5°	2259.2	2262.9	2264.2	2262.9	2266.7	2271.7	2278.0	2284.2	2288.0	2293.0	2296.7
15°	2221.7	2221.7	2224.2	2227.9	2230.4	2237.9	2244.2	2251.7	2261.7	2268.0	2274.2
17.5°	2180.4	2182.9	2186.6	2186.6	2191.7	2204.1	2207.9	2219.2	2230.4	2236.7	2249.2
20°	2135.4	2137.8	2141.6	2144.1	2150.4	2160.4	2167.9	2177.9	2190.4	2201.7	2214.2
22.5°	2100.3	2095.3	2097.8	2100.3	2106.6	2115.3	2124.1	2136.6	2149.1	2160.4	2172.9
25°	2032.8	2034.0	2037.8	2040.3	2047.8	2055.3	2065.3	2080.3	2091.6	2104.1	2117.8
27.5°	1941.5	1942.7	1949.0	1949.0	1955.2	1967.7	1974.0	1986.5	2001.5	2014.0	2030.3
30°	1837.6	1840.1	1840.1	1845.1	1848.9	1855.1	1861.4	1873.9	1881.4	1892.7	1915.2
32.5°	1742.6	1745.0	1743.8	1742.6	1738.8	1737.5	1736.3	1738.8	1741.3	1745.0	1753.8
35°	1686.3	1680.0	1675.0	1666.3	1656.3	1643.7	1632.5	1617.5	1603.7	1592.4	1579.9
37.5°	1632.5	1631.2	1623.7	1611.2	1591.2	1568.7	1542.4	1509.9	1477.3	1442.3	1408.6
40°	1557.4	1553.7	1547.4	1529.9	1507.4	1479.9	1444.8	1404.8	1352.3	1298.5	1243.4
42.5°	1429.8	1431.1	1423.6	1409.8	1388.6	1362.3	1326.0	1282.2	1225.9	1162.1	1090.8
45°	1281.0	1281.0	1278.5	1267.2	1252.2	1230.9	1203.4	1167.1	1112.1	1047.0	970.7
47.5°	1125.8	1127.1	1123.3	1120.9	1114.6	1100.8	1080.8	1053.3	1014.5	952.0	875.6
50°	968.2	968.2	974.5	973.2	973.2	968.2	959.5	943.2	909.4	859.4	788.1
52.5°	810.6	813.1	816.9	821.9	828.1	838.1	828.1	820.6	799.3	760.6	699.3
55°	648.0	650.5	656.7	665.5	673.0	683.0	685.5	685.5	674.2	648.0	601.7
57.5°	509.1	505.4	510.4	517.9	527.9	537.9	545.4	554.2	552.9	535.4	497.9
60°	382.8	384.0	387.8	395.3	402.8	411.6	421.6	429.1	432.8	424.1	400.3
62.5°	279.0	279.0	284.0	291.5	295.2	307.7	314.0	317.7	321.5	320.2	305.2
65°	195.2	197.6	200.1	203.9	207.6	215.1	218.9	226.4	228.9	230.2	218.9
67.5°	137.6	133.9	136.4	138.8	142.6	147.6	155.1	155.1	158.9	158.9	151.4
70°	87.6	87.6	88.8	92.6	95.1	96.3	98.8	101.3	105.1	103.8	103.8
72.5°	58.8	57.5	58.8	60.1	61.3	65.0	65.0	66.3	68.8	70.1	65.0
75°	30.0	31.3	33.8	32.5	36.3	33.8	35.0	38.8	37.5	35.0	35.0
77.5°	25.0	25.0	25.0	23.8	26.3	26.3	25.0	27.5	26.3	26.3	25.0
80°	17.5	18.8	17.5	16.3	17.5	16.3	16.3	16.3	16.3	16.3	15.0
82.5°	13.8	11.3	12.5	11.3	12.5	12.5	11.3	10.0	10.0	11.3	10.0
85°	10.0	7.5	8.8	8.8	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°	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2334.3	2333.0	2335.5	2334.3	2334.3	2333.0	2334.3	2333.0	2335.5	2330.5	2331.8
5°	2334.3	2331.8	2333.0	2334.3	2335.5	2333.0	2333.0	2333.0	2335.5	2333.0	2334.3
7.5°	2329.2	2328.0	2331.8	2334.3	2333.0	2331.8	2334.3	2333.0	2335.5	2334.3	2336.7
10°	2319.2	2320.5	2323.0	2326.7	2328.0	2329.2	2331.8	2331.8	2335.5	2330.5	2333.0
12.5°	2304.2	2309.2	2315.5	2318.0	2323.0	2323.0	2325.5	2326.7	2329.2	2328.0	2331.8
15°	2285.5	2291.7	2299.2	2305.5	2311.7	2315.5	2319.2	2320.5	2324.3	2320.5	2321.7
17.5°	2262.9	2270.4	2281.7	2289.2	2299.2	2303.0	2308.0	2310.5	2314.2	2311.7	2313.0
20°	2231.7	2240.4	2252.9	2264.2	2270.4	2279.2	2285.5	2289.2	2291.7	2289.2	2290.5
22.5°	2187.9	2200.4	2216.7	2225.4	2237.9	2245.4	2246.7	2255.4	2261.7	2255.4	2258.0
25°	2136.6	2149.1	2161.6	2180.4	2191.7	2200.4	2209.2	2210.4	2216.7	2215.4	2214.2
27.5°	2051.5	2067.8	2089.1	2104.1	2119.1	2132.9	2142.9	2145.3	2151.6	2149.1	2150.4
30°	1935.2	1952.7	1972.7	1996.5	2017.8	2031.5	2044.0	2052.8	2059.0	2055.3	2054.0
32.5°	1770.1	1787.6	1808.9	1832.6	1857.7	1877.6	1892.7	1903.9	1911.4	1908.9	1902.7
35°	1581.2	1586.2	1600.0	1618.7	1640.0	1661.2	1675.0	1687.5	1696.3	1698.8	1698.8
37.5°	1387.3	1371.0	1361.0	1361.0	1373.5	1382.3	1394.8	1402.3	1416.1	1421.1	1424.8
40°	1199.6	1162.1	1127.1	1100.8	1083.3	1082.1	1082.1	1085.8	1098.3	1114.6	1129.6
42.5°	1032.0	972.0	918.2	869.4	834.4	814.4	805.6	806.9	816.9	831.9	856.9
45°	898.2	823.1	755.6	696.8	649.2	618.0	603.0	601.7	609.2	626.7	654.3
47.5°	794.4	714.3	638.0	570.4	519.1	485.4	467.9	462.9	467.9	484.1	516.6
50°	708.0	625.5	546.7	476.6	421.6	386.6	370.3	364.0	370.3	384.0	416.6
52.5°	628.0	542.9	469.1	401.6	342.8	312.7	295.2	291.5	295.2	311.5	337.8
55°	535.4	462.9	390.3	322.7	271.5	241.4	227.7	223.9	227.7	242.7	270.2
57.5°	444.1	381.5	317.7	256.4	212.7	186.4	173.9	168.9	177.6	187.6	220.2
60°	359.0	309.0	255.2	201.4	165.1	141.4	131.3	130.1	132.6	145.1	167.6
62.5°	281.5	240.2	197.6	153.9	123.8	113.8	101.3	100.1	102.6	110.1	127.6
65°	202.7	176.4	143.9	112.6	88.8	75.1	70.1	71.3	73.8	78.8	95.1
67.5°	141.4	122.6	100.1	78.8	61.3	55.0	50.0	48.8	50.0	58.8	67.6
70°	95.1	83.8	67.6	60.1	42.5	33.8	35.0	31.3	36.3	36.3	43.8
72.5°	62.5	55.0	45.0	35.0	30.0	23.8	23.8	22.5	25.0	26.3	32.5
75°	32.5	25.0	25.0	17.5	12.5	6.2	11.3	10.0	8.8	10.0	12.5
77.5°	22.5	18.8	17.5	13.8	12.5	10.0	10.0	10.0	10.0	11.3	12.5
80°	13.8	13.8	10.0	8.8	7.5	6.2	7.5	7.5	7.5	7.5	8.8
82.5°	8.8	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	8.8	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	6.2	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°	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2334.3	2335.5	2335.5	2334.3	2334.3	2331.8	2336.7	2333.0	2334.3	2339.3	2335.5
5°	2336.7	2338.0	2338.0	2336.7	2336.7	2336.7	2338.0	2338.0	2336.7	2335.5	2338.0
7.5°	2341.8	2340.5	2340.5	2338.0	2338.0	2335.5	2338.0	2334.3	2336.7	2334.3	2338.0
10°	2335.5	2336.7	2335.5	2334.3	2334.3	2333.0	2333.0	2329.2	2330.5	2326.7	2329.2
12.5°	2331.8	2330.5	2330.5	2328.0	2325.5	2323.0	2321.7	2318.0	2318.0	2309.2	2313.0
15°	2321.7	2323.0	2319.2	2314.2	2311.7	2305.5	2303.0	2298.0	2293.0	2286.7	2288.0
17.5°	2313.0	2309.2	2304.2	2299.2	2289.2	2284.2	2279.2	2271.7	2269.2	2261.7	2259.2
20°	2286.7	2284.2	2278.0	2269.2	2262.9	2251.7	2246.7	2239.2	2232.9	2225.4	2221.7
22.5°	2252.9	2250.4	2242.9	2234.2	2224.2	2219.2	2214.2	2200.4	2194.1	2186.6	2185.4
25°	2210.4	2206.7	2199.2	2189.1	2184.1	2170.4	2165.4	2155.4	2152.9	2145.3	2144.1
27.5°	2145.3	2140.4	2131.6	2119.1	2110.3	2101.6	2096.6	2089.1	2086.6	2079.0	2077.8
30°	2047.8	2041.5	2024.0	2019.0	2004.0	1995.2	1995.2	1985.2	1986.5	1981.5	1981.5
32.5°	1893.9	1883.9	1870.1	1860.1	1850.1	1845.1	1845.1	1841.4	1843.9	1843.9	1846.4
35°	1690.0	1676.3	1668.7	1662.5	1662.5	1667.5	1682.5	1686.3	1693.8	1700.0	1705.0
37.5°	1428.6	1427.3	1436.1	1443.6	1462.3	1483.6	1509.9	1532.4	1553.7	1568.7	1583.7
40°	1145.9	1177.1	1202.1	1237.2	1265.9	1307.2	1354.8	1393.5	1429.8	1456.1	1483.6
42.5°	894.4	934.4	987.0	1038.3	1089.6	1145.9	1208.4	1262.2	1309.7	1346.0	1374.8
45°	696.8	751.8	815.6	880.7	947.0	1017.0	1082.1	1137.1	1187.1	1224.7	1253.4
47.5°	561.7	621.7	694.3	765.6	840.6	914.4	987.0	1034.5	1075.8	1105.8	1132.1
50°	464.1	527.9	604.2	685.5	760.6	834.4	896.9	943.2	977.0	1003.3	1019.5
52.5°	387.8	455.3	536.7	618.0	693.0	760.6	816.9	851.9	879.4	898.2	913.2
55°	320.2	385.3	461.6	537.9	611.7	675.5	721.8	748.1	769.3	780.6	789.3
57.5°	261.5	321.5	391.5	461.6	525.4	577.9	614.2	640.5	650.5	659.2	658.0
60°	205.2	261.5	325.2	385.3	440.3	482.8	509.1	524.1	531.6	535.4	532.9
62.5°	161.4	212.7	261.5	314.0	354.0	390.3	415.3	415.3	419.1	420.3	424.1
65°	120.1	158.9	201.4	240.2	272.7	296.5	310.2	314.0	319.0	317.7	315.2
67.5°	88.8	117.6	148.8	177.6	200.1	215.1	225.2	233.9	232.7	230.2	228.9
70°	61.3	80.1	107.6	125.1	141.4	156.4	158.9	160.1	161.4	162.6	160.1
72.5°	42.5	56.3	71.3	86.3	96.3	102.6	108.8	110.1	110.1	110.1	108.8
75°	21.3	28.8	42.5	48.8	57.5	60.1	65.0	65.0	68.8	63.8	62.5
77.5°	18.8	22.5	30.0	35.0	38.8	42.5	43.8	47.5	46.3	43.8	45.0
80°	11.3	13.8	18.8	21.3	26.3	27.5	28.8	30.0	28.8	30.0	30.0
82.5°	8.8	10.0	12.5	12.5	16.3	16.3	17.5	17.5	18.8	18.8	18.8
85°	5.0	8.8	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	8.8	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: P246058

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2330.5	2330.5	2330.5	2330.5
2.5°	2334.3	2336.7	2333.0	2331.8
5°	2338.0	2338.0	2335.5	2335.5
7.5°	2338.0	2338.0	2334.3	2331.8
10°	2328.0	2328.0	2324.3	2321.7
12.5°	2309.2	2309.2	2308.0	2304.2
15°	2285.5	2285.5	2280.5	2276.7
17.5°	2252.9	2255.4	2249.2	2249.2
20°	2217.9	2216.7	2211.7	2209.2
22.5°	2181.6	2179.1	2177.9	2170.4
25°	2142.9	2140.4	2136.6	2132.9
27.5°	2076.6	2075.3	2071.5	2066.6
30°	1975.2	1974.0	1969.0	1969.0
32.5°	1843.9	1842.6	1837.6	1838.9
35°	1707.5	1712.5	1710.0	1705.0
37.5°	1593.7	1597.5	1600.0	1597.5
40°	1498.6	1509.9	1511.1	1513.6
42.5°	1397.3	1412.3	1417.3	1419.8
45°	1275.9	1289.7	1301.0	1298.5
47.5°	1152.1	1162.1	1172.1	1164.6
50°	1033.3	1039.5	1043.3	1043.3
52.5°	920.7	920.7	919.4	920.7
55°	791.8	791.8	786.9	789.3
57.5°	656.7	659.2	655.5	649.2
60°	531.6	525.4	522.9	519.1
62.5°	414.1	414.1	405.3	416.6
65°	310.2	306.5	302.7	301.5
67.5°	225.2	223.9	220.2	218.9
70°	158.9	153.9	152.6	150.1
72.5°	106.3	106.3	103.8	103.8
75°	65.0	58.8	57.5	58.8
77.5°	45.0	43.8	43.8	42.5
80°	30.0	28.8	31.3	27.5
82.5°	18.8	20.0	18.8	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)