

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: P246077

Luminaire Tested: **LSR8B50D010 EC8B50935 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246077
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: LSR8B50D010 EC8B50935 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4653.0 lumens
Efficiency: N/A
Efficacy: 87.8 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

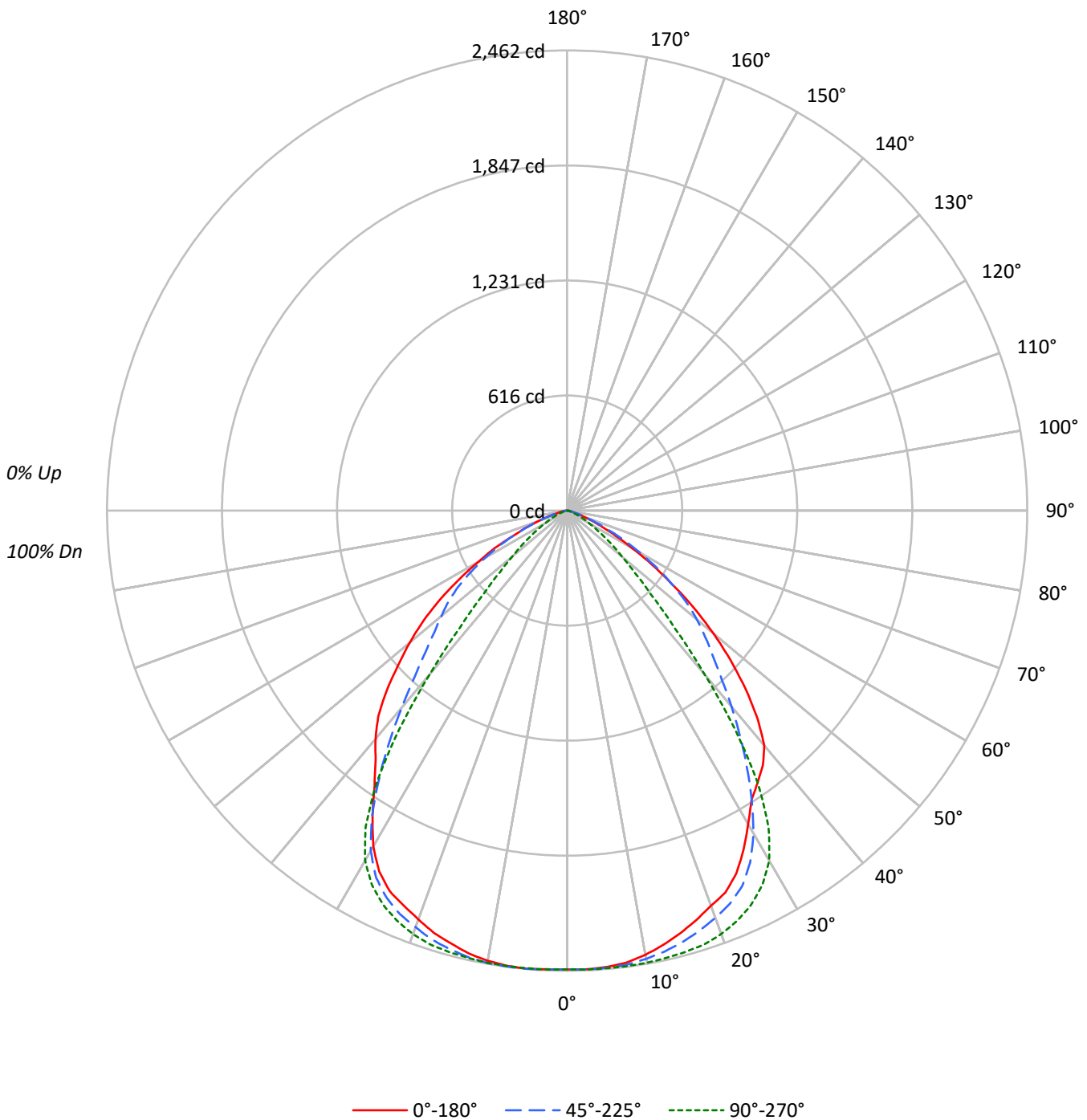
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	75703	75703	75703
5°	75869	76076	76156
10°	75550	76912	76583
15°	74715	78038	76567
20°	73818	79134	76368
25°	72859	79225	76445
30°	68927	77000	73855
35°	66871	66920	67613
40°	66041	46042	64185
45°	58846	27639	59649
50°	48932	18398	52722
55°	36698	12682	44703
60°	24866	8449	33729
65°	15002	5480	23174
70°	8313	2975	14254
75°	3765	1251	7375
80°	3267	1403	5150
85°	3715	1875	5130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.3	5.0
10°-20°	680.4	14.6
20°-30°	1032.8	22.2
30°-40°	1084.7	23.3
40°-50°	813.2	17.5
50°-60°	521.8	11.2
60°-70°	223.2	4.8
70°-80°	52.7	1.1
80°-90°	9.8	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°	1947.5	41.9
0°-40°	3032.2	65.2
0°-60°	4367.2	93.9
0°-90°	4653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4653.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2455	2455	2455	2455	2455	
5°	2451	2455	2458	2462	2460	233
15°	2340	2389	2444	2429	2398	660
25°	2141	2216	2328	2286	2247	978
35°	1776	1678	1778	1757	1796	1115
45°	1349	1103	634	1071	1368	1033
55°	683	683	236	712	832	619
65°	206	242	75	312	318	219
75°	32	37	10	63	62	46
85°	10	7	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°	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0
2.5°	2456.3	2459.0	2457.7	2457.7	2456.3	2457.7	2457.7	2460.3	2460.3	2457.7	2456.3
5°	2451.0	2453.7	2453.7	2451.0	2451.0	2457.7	2453.7	2456.3	2456.3	2455.0	2455.0
7.5°	2439.2	2439.2	2444.5	2440.5	2440.5	2444.5	2443.1	2445.8	2448.4	2449.8	2449.8
10°	2412.8	2415.5	2416.8	2416.8	2418.1	2422.1	2424.7	2430.0	2432.6	2435.2	2436.6
12.5°	2379.9	2383.9	2385.2	2383.9	2387.8	2393.1	2399.7	2406.3	2410.2	2415.5	2419.4
15°	2340.4	2340.4	2343.0	2347.0	2349.6	2357.5	2364.1	2372.0	2382.5	2389.1	2395.7
17.5°	2296.9	2299.5	2303.5	2303.5	2308.8	2321.9	2325.9	2337.7	2349.6	2356.2	2369.4
20°	2249.5	2252.1	2256.0	2258.7	2265.3	2275.8	2283.7	2294.2	2307.4	2319.3	2332.5
22.5°	2212.5	2207.3	2209.9	2212.5	2219.1	2228.4	2237.6	2250.8	2263.9	2275.8	2289.0
25°	2141.4	2142.7	2146.7	2149.3	2157.2	2165.1	2175.7	2191.5	2203.3	2216.5	2231.0
27.5°	2045.2	2046.5	2053.1	2053.1	2059.7	2072.9	2079.4	2092.6	2108.5	2121.6	2138.8
30°	1935.8	1938.4	1938.4	1943.7	1947.7	1954.3	1960.8	1974.0	1981.9	1993.8	2017.5
32.5°	1835.7	1838.3	1837.0	1835.7	1831.7	1830.4	1829.1	1831.7	1834.4	1838.3	1847.5
35°	1776.4	1769.8	1764.5	1755.3	1744.7	1731.6	1719.7	1703.9	1689.4	1677.5	1664.4
37.5°	1719.7	1718.4	1710.5	1697.3	1676.2	1652.5	1624.8	1590.6	1556.3	1519.4	1483.8
40°	1640.6	1636.7	1630.1	1611.6	1587.9	1558.9	1522.0	1479.9	1424.5	1367.8	1309.9
42.5°	1506.2	1507.5	1499.6	1485.1	1462.7	1435.0	1396.8	1350.7	1291.4	1224.2	1149.1
45°	1349.4	1349.4	1346.8	1334.9	1319.1	1296.7	1267.7	1229.5	1171.5	1103.0	1022.6
47.5°	1186.0	1187.3	1183.3	1180.7	1174.1	1159.6	1138.6	1109.6	1068.7	1002.8	922.4
50°	1020.0	1020.0	1026.5	1025.2	1025.2	1020.0	1010.7	993.6	958.0	905.3	830.2
52.5°	853.9	856.6	860.5	865.8	872.4	882.9	872.4	864.5	842.0	801.2	736.6
55°	682.6	685.2	691.8	701.0	709.0	719.5	722.1	722.1	710.3	682.6	633.8
57.5°	536.3	532.4	537.7	545.6	556.1	566.7	574.6	583.8	582.5	564.0	524.5
60°	403.2	404.6	408.5	416.4	424.3	433.6	444.1	452.0	456.0	446.7	421.7
62.5°	293.9	293.9	299.1	307.0	311.0	324.2	330.8	334.7	338.7	337.3	321.5
65°	205.6	208.2	210.8	214.8	218.7	226.6	230.6	238.5	241.2	242.5	230.6
67.5°	145.0	141.0	143.6	146.3	150.2	155.5	163.4	163.4	167.3	167.3	159.4
70°	92.2	92.2	93.6	97.5	100.1	101.5	104.1	106.7	110.7	109.4	109.4
72.5°	61.9	60.6	61.9	63.3	64.6	68.5	68.5	69.8	72.5	73.8	68.5
75°	31.6	33.0	35.6	34.3	38.2	35.6	36.9	40.9	39.5	36.9	36.9
77.5°	26.3	26.3	26.3	25.1	27.7	27.7	26.3	29.0	27.7	27.7	26.3
80°	18.4	19.8	18.4	17.1	18.4	17.1	17.1	17.1	17.1	17.1	15.8
82.5°	14.5	11.9	13.2	11.9	13.2	13.2	11.9	10.5	10.5	11.9	10.5
85°	10.5	7.9	9.2	9.2	7.9	7.9	7.9	7.9	7.9	6.6	6.6
87.5°	6.6	4.0	4.0	4.0	5.3	5.3	5.3	4.0	5.3	5.3	2.6
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°	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0
2.5°	2459.0	2457.7	2460.3	2459.0	2459.0	2457.7	2459.0	2457.7	2460.3	2455.0	2456.3
5°	2459.0	2456.3	2457.7	2459.0	2460.3	2457.7	2457.7	2457.7	2460.3	2457.7	2459.0
7.5°	2453.7	2452.4	2456.3	2459.0	2457.7	2456.3	2459.0	2457.7	2460.3	2459.0	2461.6
10°	2443.1	2444.5	2447.1	2451.0	2452.4	2453.7	2456.3	2456.3	2460.3	2455.0	2457.7
12.5°	2427.3	2432.6	2439.2	2441.8	2447.1	2447.1	2449.8	2451.0	2453.7	2452.4	2456.3
15°	2407.6	2414.2	2422.1	2428.7	2435.2	2439.2	2443.1	2444.5	2448.4	2444.5	2445.8
17.5°	2383.9	2391.8	2403.6	2411.5	2422.1	2426.0	2431.3	2433.9	2437.9	2435.2	2436.6
20°	2350.9	2360.2	2373.3	2385.2	2391.8	2401.0	2407.6	2411.5	2414.2	2411.5	2412.8
22.5°	2304.8	2318.0	2335.1	2344.3	2357.5	2365.4	2366.7	2376.0	2382.5	2376.0	2378.6
25°	2250.8	2263.9	2277.1	2296.9	2308.8	2318.0	2327.2	2328.5	2335.1	2333.8	2332.5
27.5°	2161.1	2178.3	2200.7	2216.5	2232.3	2246.8	2257.4	2260.0	2266.6	2263.9	2265.3
30°	2038.6	2057.1	2078.1	2103.2	2125.6	2140.1	2153.2	2162.5	2169.0	2165.1	2163.8
32.5°	1864.7	1883.1	1905.5	1930.5	1956.9	1978.0	1993.8	2005.7	2013.6	2010.9	2004.3
35°	1665.7	1670.9	1685.4	1705.2	1727.6	1750.0	1764.5	1777.7	1786.9	1789.5	1789.5
37.5°	1461.4	1444.3	1433.8	1433.8	1446.9	1456.1	1469.3	1477.2	1491.7	1497.0	1501.0
40°	1263.7	1224.2	1187.3	1159.6	1141.2	1139.9	1139.9	1143.8	1157.0	1174.1	1190.0
42.5°	1087.2	1023.9	967.3	915.9	879.0	857.9	848.7	850.0	860.5	876.3	902.7
45°	946.2	867.1	795.9	734.0	683.9	651.0	635.2	633.8	641.7	660.2	689.2
47.5°	836.8	752.4	672.1	600.9	546.9	511.3	492.8	487.6	492.8	510.0	544.2
50°	745.9	658.9	575.9	502.1	444.1	407.2	390.1	383.5	390.1	404.6	438.8
52.5°	661.5	571.9	494.2	423.0	361.1	329.4	311.0	307.0	311.0	328.1	355.8
55°	564.0	487.6	411.1	340.0	286.0	254.3	239.8	235.9	239.8	255.7	284.6
57.5°	467.8	401.9	334.7	270.1	224.0	196.3	183.2	177.9	187.1	197.7	231.9
60°	378.2	325.5	268.8	212.2	174.0	148.9	138.4	137.0	139.7	152.9	176.6
62.5°	296.5	253.0	208.2	162.1	130.5	119.9	106.7	105.4	108.0	115.9	134.4
65°	213.5	185.8	151.5	118.6	93.6	79.1	73.8	75.1	77.7	83.0	100.1
67.5°	148.9	129.1	105.4	83.0	64.6	58.0	52.7	51.4	52.7	61.9	71.2
70°	100.1	88.3	71.2	63.3	44.8	35.6	36.9	33.0	38.2	38.2	46.1
72.5°	65.9	58.0	47.4	36.9	31.6	25.1	25.1	23.7	26.3	27.7	34.3
75°	34.3	26.3	26.3	18.4	13.2	6.6	11.9	10.5	9.2	10.5	13.2
77.5°	23.7	19.8	18.4	14.5	13.2	10.5	10.5	10.5	10.5	11.9	13.2
80°	14.5	14.5	10.5	9.2	7.9	6.6	7.9	7.9	7.9	7.9	9.2
82.5°	9.2	7.9	7.9	6.6	6.6	5.3	5.3	5.3	5.3	5.3	7.9
85°	7.9	5.3	5.3	4.0	5.3	9.2	4.0	5.3	5.3	5.3	4.0
87.5°	2.6	4.0	4.0	4.0	2.6	1.3	2.6	4.0	4.0	6.6	5.3
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°	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0	2455.0
2.5°	2459.0	2460.3	2460.3	2459.0	2459.0	2456.3	2461.6	2457.7	2459.0	2464.2	2460.3
5°	2461.6	2462.9	2462.9	2461.6	2461.6	2461.6	2462.9	2462.9	2461.6	2460.3	2462.9
7.5°	2466.9	2465.6	2465.6	2462.9	2462.9	2460.3	2462.9	2459.0	2461.6	2459.0	2462.9
10°	2460.3	2461.6	2460.3	2459.0	2459.0	2457.7	2457.7	2453.7	2455.0	2451.0	2453.7
12.5°	2456.3	2455.0	2455.0	2452.4	2449.8	2447.1	2445.8	2441.8	2441.8	2432.6	2436.6
15°	2445.8	2447.1	2443.1	2437.9	2435.2	2428.7	2426.0	2420.7	2415.5	2408.9	2410.2
17.5°	2436.6	2432.6	2427.3	2422.1	2411.5	2406.3	2401.0	2393.1	2390.4	2382.5	2379.9
20°	2408.9	2406.3	2399.7	2390.4	2383.9	2372.0	2366.7	2358.8	2352.2	2344.3	2340.4
22.5°	2373.3	2370.7	2362.8	2353.5	2343.0	2337.7	2332.5	2318.0	2311.4	2303.5	2302.1
25°	2328.5	2324.6	2316.7	2306.1	2300.8	2286.3	2281.1	2270.5	2267.9	2260.0	2258.7
27.5°	2260.0	2254.7	2245.5	2232.3	2223.1	2213.9	2208.6	2200.7	2198.1	2190.1	2188.8
30°	2157.2	2150.6	2132.2	2126.9	2111.1	2101.8	2101.8	2091.3	2092.6	2087.4	2087.4
32.5°	1995.1	1984.6	1970.1	1959.5	1949.0	1943.7	1943.7	1939.8	1942.4	1942.4	1945.0
35°	1780.3	1765.8	1757.9	1751.3	1751.3	1756.6	1772.4	1776.4	1784.3	1790.9	1796.1
37.5°	1504.9	1503.6	1512.8	1520.7	1540.5	1562.9	1590.6	1614.3	1636.7	1652.5	1668.3
40°	1207.1	1240.0	1266.4	1303.3	1333.6	1377.1	1427.1	1468.0	1506.2	1533.9	1562.9
42.5°	942.2	984.4	1039.7	1093.7	1147.8	1207.1	1273.0	1329.6	1379.7	1417.9	1448.2
45°	734.0	792.0	859.2	927.7	997.6	1071.4	1139.9	1197.9	1250.6	1290.1	1320.4
47.5°	591.7	654.9	731.4	806.5	885.5	963.3	1039.7	1089.8	1133.3	1164.9	1192.6
50°	488.9	556.1	636.5	722.1	801.2	879.0	944.8	993.6	1029.2	1056.9	1074.0
52.5°	408.5	479.7	565.3	651.0	730.0	801.2	860.5	897.4	926.4	946.2	962.0
55°	337.3	405.9	486.3	566.7	644.4	711.6	760.3	788.0	810.4	822.3	831.5
57.5°	275.4	338.7	412.5	486.3	553.5	608.8	647.0	674.7	685.2	694.5	693.1
60°	216.1	275.4	342.6	405.9	463.9	508.6	536.3	552.1	560.0	564.0	561.4
62.5°	170.0	224.0	275.4	330.8	372.9	411.1	437.5	437.5	441.5	442.8	446.7
65°	126.5	167.3	212.2	253.0	287.3	312.3	326.8	330.8	336.0	334.7	332.1
67.5°	93.6	123.9	156.8	187.1	210.8	226.6	237.2	246.4	245.1	242.5	241.2
70°	64.6	84.3	113.3	131.8	148.9	164.7	167.3	168.7	170.0	171.3	168.7
72.5°	44.8	59.3	75.1	90.9	101.5	108.0	114.7	115.9	115.9	115.9	114.7
75°	22.4	30.3	44.8	51.4	60.6	63.3	68.5	68.5	72.5	67.2	65.9
77.5°	19.8	23.7	31.6	36.9	40.9	44.8	46.1	50.1	48.8	46.1	47.4
80°	11.9	14.5	19.8	22.4	27.7	29.0	30.3	31.6	30.3	31.6	31.6
82.5°	9.2	10.5	13.2	13.2	17.1	17.1	18.4	18.4	19.8	19.8	19.8
85°	5.3	9.2	7.9	15.8	10.5	10.5	13.2	15.8	13.2	13.2	15.8
87.5°	5.3	5.3	4.0	5.3	5.3	5.3	6.6	7.9	7.9	9.2	7.9
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: P246077

CATALOG NUMBER: LSR8B50D010 EC8B50935 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2455.0	2455.0	2455.0	2455.0
2.5°	2459.0	2461.6	2457.7	2456.3
5°	2462.9	2462.9	2460.3	2460.3
7.5°	2462.9	2462.9	2459.0	2456.3
10°	2452.4	2452.4	2448.4	2445.8
12.5°	2432.6	2432.6	2431.3	2427.3
15°	2407.6	2407.6	2402.3	2398.4
17.5°	2373.3	2376.0	2369.4	2369.4
20°	2336.4	2335.1	2329.8	2327.2
22.5°	2298.2	2295.6	2294.2	2286.3
25°	2257.4	2254.7	2250.8	2246.8
27.5°	2187.5	2186.2	2182.2	2177.0
30°	2080.8	2079.4	2074.2	2074.2
32.5°	1942.4	1941.1	1935.8	1937.1
35°	1798.8	1804.0	1801.4	1796.1
37.5°	1678.8	1682.8	1685.4	1682.8
40°	1578.7	1590.6	1591.9	1594.5
42.5°	1472.0	1487.8	1493.1	1495.7
45°	1344.1	1358.6	1370.5	1367.8
47.5°	1213.7	1224.2	1234.7	1226.8
50°	1088.5	1095.1	1099.0	1099.0
52.5°	969.9	969.9	968.6	969.9
55°	834.1	834.1	828.9	831.5
57.5°	691.8	694.5	690.5	683.9
60°	560.0	553.5	550.8	546.9
62.5°	436.2	436.2	427.0	438.8
65°	326.8	322.9	318.9	317.6
67.5°	237.2	235.9	231.9	230.6
70°	167.3	162.1	160.8	158.1
72.5°	112.0	112.0	109.4	109.4
75°	68.5	61.9	60.6	61.9
77.5°	47.4	46.1	46.1	44.8
80°	31.6	30.3	33.0	29.0
82.5°	19.8	21.1	19.8	21.1
85°	13.2	15.8	14.5	14.5
87.5°	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)