

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: P246035

Luminaire Tested: **LSR8B50D010 EC8B50827 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246035
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 EC8B50827 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5118.0 lumens
Efficiency: N/A
Efficacy: 96.6 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

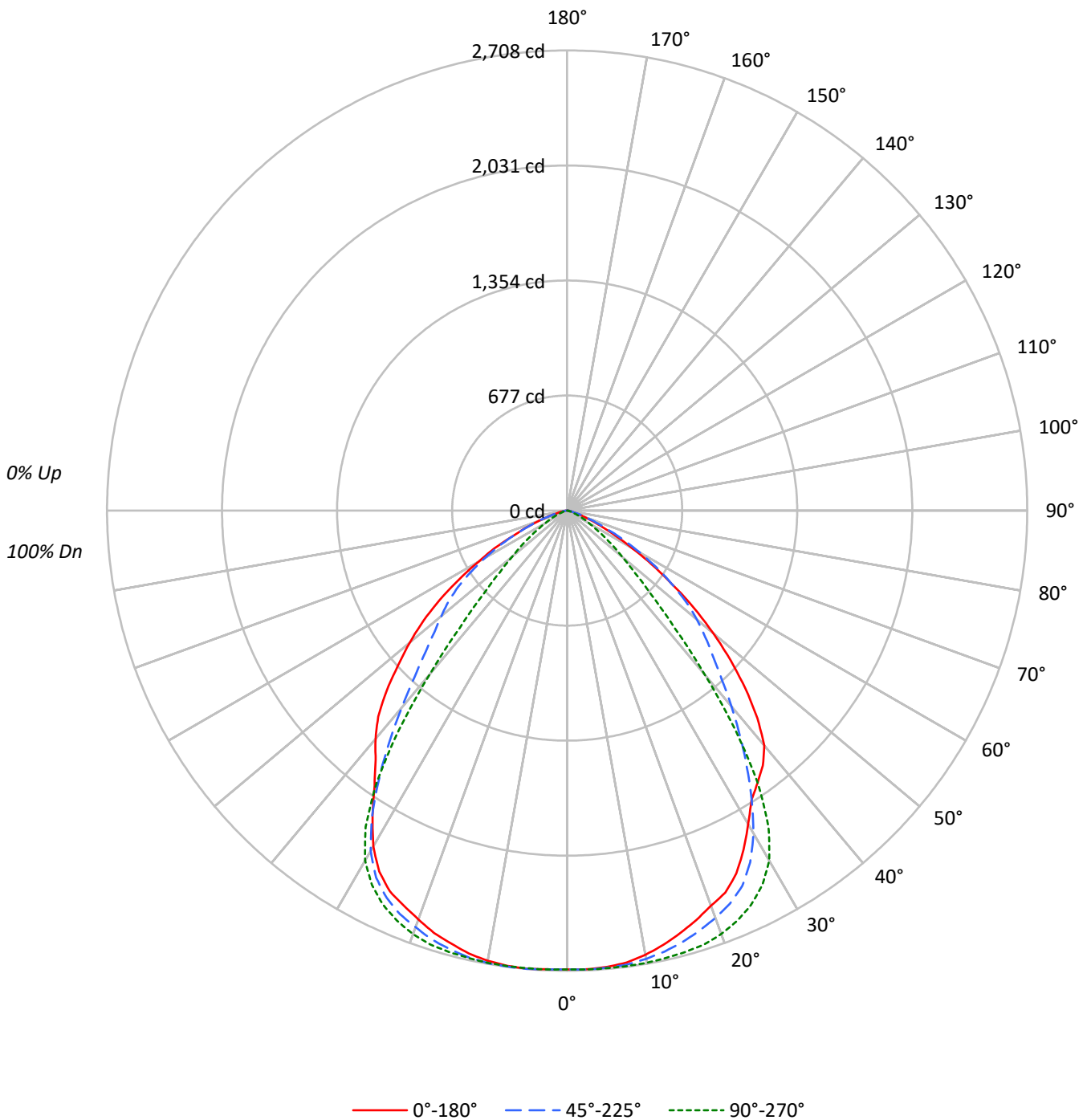
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	83270	83270	83270
5°	83452	83678	83768
10°	83102	84599	84236
15°	82179	85838	84216
20°	81195	87043	84001
25°	80140	87143	84087
30°	75817	84694	81237
35°	73553	73606	74370
40°	72642	50643	70601
45°	64729	30404	65610
50°	53821	20235	57994
55°	40364	13951	49170
60°	27352	9294	37096
65°	16497	6027	25487
70°	9151	3264	15679
75°	4146	1382	8114
80°	3605	1545	5665
85°	4104	2052	5661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.7	5.0
10°-20°	748.4	14.6
20°-30°	1136.0	22.2
30°-40°	1193.1	23.3
40°-50°	894.5	17.5
50°-60°	573.9	11.2
60°-70°	245.5	4.8
70°-80°	58.0	1.1
80°-90°	10.8	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°	2142.1	41.9
0°-40°	3335.2	65.2
0°-60°	4803.7	93.9
0°-90°	5118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5118.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2700	2700	2700	2700	2700	
5°	2696	2700	2703	2708	2706	256
15°	2574	2628	2689	2671	2638	726
25°	2355	2438	2561	2515	2471	1076
35°	1954	1845	1955	1932	1976	1226
45°	1484	1213	697	1178	1504	1137
55°	751	751	260	783	915	681
65°	226	267	83	344	349	241
75°	35	41	12	70	68	51
85°	12	7	6	12	16	12
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°	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4
2.5°	2701.8	2704.7	2703.3	2703.3	2701.8	2703.3	2703.3	2706.2	2706.2	2703.3	2701.8
5°	2696.0	2698.9	2698.9	2696.0	2696.0	2703.3	2698.9	2701.8	2701.8	2700.4	2700.4
7.5°	2683.0	2683.0	2688.8	2684.4	2684.4	2688.8	2687.3	2690.2	2693.1	2694.6	2694.6
10°	2654.0	2656.9	2658.3	2658.3	2659.8	2664.1	2667.0	2672.8	2675.7	2678.6	2680.1
12.5°	2617.8	2622.1	2623.5	2622.1	2626.4	2632.2	2639.5	2646.7	2651.1	2656.9	2661.2
15°	2574.2	2574.2	2577.1	2581.5	2584.4	2593.1	2600.3	2609.0	2620.6	2627.9	2635.1
17.5°	2526.4	2529.3	2533.7	2533.7	2539.5	2554.0	2558.3	2571.4	2584.4	2591.7	2606.2
20°	2474.3	2477.1	2481.5	2484.4	2491.6	2503.2	2511.9	2523.5	2538.0	2551.1	2565.6
22.5°	2433.7	2427.9	2430.7	2433.7	2440.9	2451.1	2461.2	2475.7	2490.2	2503.2	2517.7
25°	2355.4	2356.8	2361.2	2364.1	2372.8	2381.5	2393.1	2410.5	2423.5	2438.0	2453.9
27.5°	2249.6	2251.0	2258.3	2258.3	2265.5	2280.0	2287.2	2301.8	2319.2	2333.6	2352.5
30°	2129.3	2132.2	2132.2	2138.0	2142.3	2149.6	2156.8	2171.3	2180.0	2193.0	2219.2
32.5°	2019.1	2022.0	2020.5	2019.1	2014.8	2013.3	2011.9	2014.8	2017.7	2022.0	2032.1
35°	1953.9	1946.6	1940.8	1930.7	1919.1	1904.6	1891.6	1874.2	1858.2	1845.2	1830.7
37.5°	1891.6	1890.1	1881.4	1866.9	1843.7	1817.6	1787.2	1749.5	1711.8	1671.2	1632.1
40°	1804.6	1800.2	1793.0	1772.7	1746.6	1714.7	1674.1	1627.8	1566.9	1504.5	1440.8
42.5°	1656.7	1658.2	1649.5	1633.5	1608.9	1578.5	1536.4	1485.7	1420.5	1346.5	1263.9
45°	1484.3	1484.3	1481.4	1468.3	1450.9	1426.3	1394.4	1352.4	1288.6	1213.2	1124.8
47.5°	1304.5	1306.0	1301.6	1298.7	1291.5	1275.5	1252.3	1220.5	1175.5	1103.0	1014.6
50°	1121.9	1121.9	1129.1	1127.7	1127.7	1121.9	1111.8	1092.9	1053.8	995.8	913.2
52.5°	939.3	942.2	946.5	952.3	959.5	971.1	959.5	950.8	926.2	881.3	810.3
55°	750.8	753.7	761.0	771.1	779.8	791.4	794.3	794.3	781.2	750.8	697.2
57.5°	589.9	585.6	591.4	600.1	611.7	623.3	632.0	642.1	640.7	620.4	576.9
60°	443.5	445.0	449.3	458.0	466.7	476.9	488.5	497.2	501.5	491.4	463.8
62.5°	323.2	323.2	329.0	337.7	342.1	356.6	363.8	368.2	372.5	371.0	353.7
65°	226.1	229.0	231.9	236.3	240.6	249.3	253.7	262.3	265.3	266.7	253.7
67.5°	159.5	155.1	158.0	160.9	165.2	171.1	179.7	179.7	184.1	184.1	175.4
70°	101.5	101.5	102.9	107.3	110.2	111.6	114.5	117.4	121.8	120.3	120.3
72.5°	68.1	66.7	68.1	69.6	71.0	75.4	75.4	76.8	79.7	81.2	75.4
75°	34.8	36.2	39.1	37.7	42.0	39.1	40.6	44.9	43.5	40.6	40.6
77.5°	29.0	29.0	29.0	27.6	30.4	30.4	29.0	31.9	30.4	30.4	29.0
80°	20.3	21.7	20.3	18.8	20.3	18.8	18.8	18.8	18.8	18.8	17.4
82.5°	16.0	13.1	14.5	13.1	14.5	14.5	13.1	11.6	11.6	13.1	11.6
85°	11.6	8.7	10.1	10.1	8.7	8.7	8.7	8.7	8.7	7.2	7.2
87.5°	7.2	4.4	4.4	4.4	5.8	5.8	5.8	4.4	5.8	5.8	2.9
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°	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4
2.5°	2704.7	2703.3	2706.2	2704.7	2704.7	2703.3	2704.7	2703.3	2706.2	2700.4	2701.8
5°	2704.7	2701.8	2703.3	2704.7	2706.2	2703.3	2703.3	2703.3	2706.2	2703.3	2704.7
7.5°	2698.9	2697.4	2701.8	2704.7	2703.3	2701.8	2704.7	2703.3	2706.2	2704.7	2707.6
10°	2687.3	2688.8	2691.7	2696.0	2697.4	2698.9	2701.8	2701.8	2706.2	2700.4	2703.3
12.5°	2669.9	2675.7	2683.0	2685.9	2691.7	2691.7	2694.6	2696.0	2698.9	2697.4	2701.8
15°	2648.2	2655.4	2664.1	2671.4	2678.6	2683.0	2687.3	2688.8	2693.1	2688.8	2690.2
17.5°	2622.1	2630.8	2643.8	2652.5	2664.1	2668.5	2674.3	2677.2	2681.5	2678.6	2680.1
20°	2585.8	2596.0	2610.5	2623.5	2630.8	2640.9	2648.2	2652.5	2655.4	2652.5	2654.0
22.5°	2535.1	2549.6	2568.5	2578.6	2593.1	2601.8	2603.3	2613.4	2620.6	2613.4	2616.3
25°	2475.7	2490.2	2504.7	2526.4	2539.5	2549.6	2559.8	2561.2	2568.5	2567.0	2565.6
27.5°	2377.1	2396.0	2420.6	2438.0	2455.4	2471.4	2482.9	2485.8	2493.1	2490.2	2491.6
30°	2242.3	2262.6	2285.8	2313.4	2338.0	2353.9	2368.4	2378.6	2385.8	2381.5	2380.0
32.5°	2051.0	2071.3	2095.9	2123.5	2152.5	2175.6	2193.0	2206.1	2214.8	2211.9	2204.6
35°	1832.1	1837.9	1853.9	1875.6	1900.2	1924.9	1940.8	1955.3	1965.5	1968.4	1968.4
37.5°	1607.5	1588.6	1577.0	1577.0	1591.5	1601.7	1616.2	1624.8	1640.8	1646.6	1650.9
40°	1390.0	1346.5	1306.0	1275.5	1255.3	1253.8	1253.8	1258.1	1272.6	1291.5	1308.9
42.5°	1195.8	1126.2	1063.9	1007.4	966.8	943.6	933.5	934.9	946.5	963.9	992.9
45°	1040.7	953.8	875.5	807.4	752.3	716.0	698.6	697.2	705.9	726.2	758.1
47.5°	920.4	827.6	739.2	660.9	601.5	562.4	542.1	536.3	542.1	560.9	598.6
50°	820.4	724.8	633.4	552.2	488.5	447.9	429.0	421.8	429.0	445.0	482.7
52.5°	727.6	629.1	543.6	465.3	397.2	362.4	342.1	337.7	342.1	360.9	391.4
55°	620.4	536.3	452.2	374.0	314.5	279.8	263.8	259.5	263.8	281.2	313.1
57.5°	514.6	442.1	368.2	297.1	246.4	216.0	201.5	195.7	205.8	217.4	255.1
60°	416.0	358.0	295.7	233.4	191.3	163.8	152.2	150.7	153.6	168.1	194.2
62.5°	326.1	278.3	229.0	178.3	143.5	131.9	117.4	116.0	118.8	127.5	147.9
65°	234.8	204.4	166.7	130.4	102.9	87.0	81.2	82.6	85.5	91.3	110.2
67.5°	163.8	142.0	116.0	91.3	71.0	63.8	58.0	56.5	58.0	68.1	78.3
70°	110.2	97.1	78.3	69.6	49.3	39.1	40.6	36.2	42.0	42.0	50.7
72.5°	72.5	63.8	52.2	40.6	34.8	27.6	27.6	26.1	29.0	30.4	37.7
75°	37.7	29.0	29.0	20.3	14.5	7.2	13.1	11.6	10.1	11.6	14.5
77.5°	26.1	21.7	20.3	16.0	14.5	11.6	11.6	11.6	11.6	13.1	14.5
80°	16.0	16.0	11.6	10.1	8.7	7.2	8.7	8.7	8.7	8.7	10.1
82.5°	10.1	8.7	8.7	7.2	7.2	5.8	5.8	5.8	5.8	5.8	8.7
85°	8.7	5.8	5.8	4.4	5.8	10.1	4.4	5.8	5.8	5.8	4.4
87.5°	2.9	4.4	4.4	4.4	2.9	1.5	2.9	4.4	4.4	7.2	5.8
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°	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4	2700.4
2.5°	2704.7	2706.2	2706.2	2704.7	2704.7	2701.8	2707.6	2703.3	2704.7	2710.5	2706.2
5°	2707.6	2709.0	2709.0	2707.6	2707.6	2707.6	2709.0	2709.0	2707.6	2706.2	2709.0
7.5°	2713.4	2712.0	2712.0	2709.0	2709.0	2706.2	2709.0	2704.7	2707.6	2704.7	2709.0
10°	2706.2	2707.6	2706.2	2704.7	2704.7	2703.3	2703.3	2698.9	2700.4	2696.0	2698.9
12.5°	2701.8	2700.4	2700.4	2697.4	2694.6	2691.7	2690.2	2685.9	2685.9	2675.7	2680.1
15°	2690.2	2691.7	2687.3	2681.5	2678.6	2671.4	2668.5	2662.7	2656.9	2649.6	2651.1
17.5°	2680.1	2675.7	2669.9	2664.1	2652.5	2646.7	2640.9	2632.2	2629.3	2620.6	2617.8
20°	2649.6	2646.7	2639.5	2629.3	2622.1	2609.0	2603.3	2594.6	2587.3	2578.6	2574.2
22.5°	2610.5	2607.6	2598.9	2588.7	2577.1	2571.4	2565.6	2549.6	2542.4	2533.7	2532.2
25°	2561.2	2556.9	2548.2	2536.6	2530.8	2514.8	2509.0	2497.4	2494.5	2485.8	2484.4
27.5°	2485.8	2480.0	2469.9	2455.4	2445.2	2435.1	2429.3	2420.6	2417.7	2409.0	2407.6
30°	2372.8	2365.5	2345.2	2339.5	2322.0	2311.9	2311.9	2300.3	2301.8	2296.0	2296.0
32.5°	2194.5	2182.9	2166.9	2155.3	2143.8	2138.0	2138.0	2133.6	2136.5	2136.5	2139.4
35°	1958.2	1942.3	1933.6	1926.3	1926.3	1932.1	1949.5	1953.9	1962.6	1969.8	1975.6
37.5°	1655.3	1653.9	1664.0	1672.7	1694.4	1719.1	1749.5	1775.6	1800.2	1817.6	1835.0
40°	1327.7	1364.0	1392.9	1433.5	1466.8	1514.7	1569.8	1614.7	1656.7	1687.2	1719.1
42.5°	1036.4	1082.7	1143.6	1203.0	1262.5	1327.7	1400.2	1462.5	1517.6	1559.6	1593.0
45°	807.4	871.1	945.1	1020.4	1097.3	1178.4	1253.8	1317.6	1375.6	1419.0	1452.4
47.5°	650.8	720.4	804.4	887.1	974.0	1059.6	1143.6	1198.7	1246.5	1281.3	1311.8
50°	537.7	611.7	700.1	794.3	881.3	966.8	1039.3	1092.9	1132.0	1162.5	1181.3
52.5°	449.3	527.6	621.8	716.0	803.0	881.3	946.5	987.1	1019.0	1040.7	1058.1
55°	371.0	446.4	534.9	623.3	708.8	782.7	836.3	866.8	891.4	904.5	914.6
57.5°	303.0	372.5	453.7	534.9	608.8	669.7	711.7	742.1	753.7	763.9	762.4
60°	237.7	303.0	376.9	446.4	510.2	559.5	589.9	607.3	616.0	620.4	617.5
62.5°	187.0	246.4	303.0	363.8	410.2	452.2	481.2	481.2	485.6	487.0	491.4
65°	139.1	184.1	233.4	278.3	316.0	343.5	359.5	363.8	369.6	368.2	365.3
67.5°	102.9	136.3	172.5	205.8	231.9	249.3	260.9	271.1	269.6	266.7	265.3
70°	71.0	92.8	124.7	145.0	163.8	181.2	184.1	185.5	187.0	188.4	185.5
72.5°	49.3	65.2	82.6	100.0	111.6	118.8	126.1	127.5	127.5	127.5	126.1
75°	24.6	33.3	49.3	56.5	66.7	69.6	75.4	75.4	79.7	73.9	72.5
77.5°	21.7	26.1	34.8	40.6	44.9	49.3	50.7	55.1	53.6	50.7	52.2
80°	13.1	16.0	21.7	24.6	30.4	31.9	33.3	34.8	33.3	34.8	34.8
82.5°	10.1	11.6	14.5	14.5	18.8	18.8	20.3	20.3	21.7	21.7	21.7
85°	5.8	10.1	8.7	17.4	11.6	11.6	14.5	17.4	14.5	14.5	17.4
87.5°	5.8	5.8	4.4	5.8	5.8	5.8	7.2	8.7	8.7	10.1	8.7
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: P246035

CATALOG NUMBER: LSR8B50D010 EC8B50827 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2700.4	2700.4	2700.4	2700.4
2.5°	2704.7	2707.6	2703.3	2701.8
5°	2709.0	2709.0	2706.2	2706.2
7.5°	2709.0	2709.0	2704.7	2701.8
10°	2697.4	2697.4	2693.1	2690.2
12.5°	2675.7	2675.7	2674.3	2669.9
15°	2648.2	2648.2	2642.4	2638.0
17.5°	2610.5	2613.4	2606.2	2606.2
20°	2569.9	2568.5	2562.7	2559.8
22.5°	2527.9	2525.0	2523.5	2514.8
25°	2482.9	2480.0	2475.7	2471.4
27.5°	2406.1	2404.7	2400.3	2394.5
30°	2288.7	2287.2	2281.5	2281.5
32.5°	2136.5	2135.1	2129.3	2130.7
35°	1978.5	1984.3	1981.4	1975.6
37.5°	1846.6	1851.0	1853.9	1851.0
40°	1736.5	1749.5	1751.0	1753.9
42.5°	1619.1	1636.4	1642.3	1645.1
45°	1478.4	1494.4	1507.5	1504.5
47.5°	1334.9	1346.5	1358.1	1349.5
50°	1197.3	1204.5	1208.9	1208.9
52.5°	1066.8	1066.8	1065.4	1066.8
55°	917.5	917.5	911.7	914.6
57.5°	761.0	763.9	759.5	752.3
60°	616.0	608.8	605.9	601.5
62.5°	479.8	479.8	469.6	482.7
65°	359.5	355.1	350.8	349.3
67.5°	260.9	259.5	255.1	253.7
70°	184.1	178.3	176.8	173.9
72.5°	123.2	123.2	120.3	120.3
75°	75.4	68.1	66.7	68.1
77.5°	52.2	50.7	50.7	49.3
80°	34.8	33.3	36.2	31.9
82.5°	21.7	23.2	21.7	23.2
85°	14.5	17.4	16.0	16.0
87.5°	8.7	8.7	8.7	8.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)