

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: P245513

Luminaire Tested: **LSR8B50D010 EC8B50950 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245513  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B50D010 EC8B50950 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5187.0 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

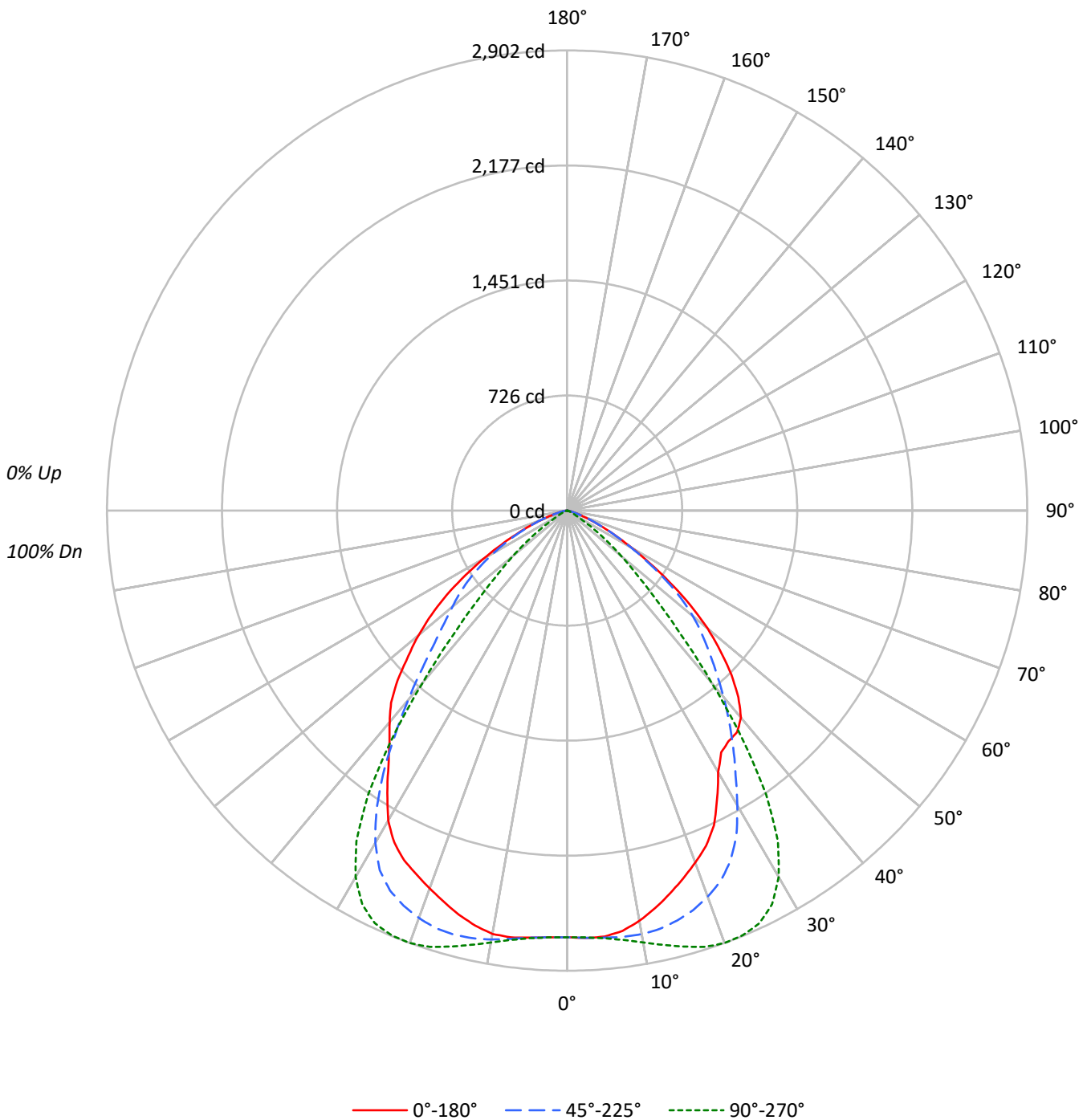
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	82974	82974	82974
5°	83471	83780	83691
10°	82244	86581	84884
15°	79839	90872	84216
20°	77523	95237	83193
25°	74543	97676	82808
30°	67841	94999	80350
35°	66830	82317	73929
40°	68649	57092	70082
45°	63905	34504	65898
50°	55433	21310	58719
55°	42536	11134	49832
60°	28980	4490	37614
65°	18030	2291	25946
70°	9782	1416	15841
75°	5099	679	9365
80°	2291	764	5079
85°	1521	495	4564



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.8	5.0
10°-20°	766.6	14.8
20°-30°	1169.5	22.5
30°-40°	1220.4	23.5
40°-50°	916.7	17.7
50°-60°	564.0	10.9
60°-70°	229.5	4.4
70°-80°	54.1	1.0
80°-90°	7.5	0.1
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°	2194.9	42.3
0°-40°	3415.3	65.8
0°-60°	4895.9	94.4
0°-90°	5187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5187.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2691	2691	2691	2691	2691	
5°	2697	2704	2707	2704	2704	255
15°	2501	2677	2846	2768	2638	705
25°	2191	2437	2871	2644	2434	996
35°	1775	1825	2187	2021	1964	1121
45°	1465	1268	791	1181	1511	1118
55°	791	751	207	751	927	711
65°	247	250	31	336	356	258
75°	43	43	6	76	79	52
85°	4	4	1	10	13	6
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°	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8
2.5°	2698.0	2693.7	2698.0	2698.0	2699.4	2696.6	2698.0	2699.4	2696.6	2696.6	2696.6
5°	2696.6	2693.7	2696.6	2695.1	2698.0	2698.0	2700.9	2700.9	2703.7	2703.7	2708.0
7.5°	2673.7	2668.0	2673.7	2678.0	2680.8	2686.6	2693.7	2699.4	2705.1	2710.9	2718.0
10°	2626.6	2626.6	2630.9	2639.4	2648.0	2658.0	2670.8	2685.1	2699.4	2712.3	2725.1
12.5°	2568.0	2563.7	2572.3	2583.7	2596.6	2612.3	2632.3	2653.7	2676.6	2702.3	2722.3
15°	2500.9	2496.6	2506.6	2518.0	2533.7	2556.6	2580.9	2609.4	2642.3	2676.6	2709.4
17.5°	2432.3	2430.9	2440.9	2456.6	2469.5	2493.7	2525.2	2559.4	2596.6	2642.3	2685.1
20°	2362.4	2360.9	2370.9	2383.8	2400.9	2423.8	2455.2	2495.2	2539.4	2590.9	2640.9
22.5°	2289.5	2290.9	2299.5	2313.8	2328.1	2352.3	2385.2	2425.2	2473.7	2529.4	2585.2
25°	2190.9	2183.8	2195.2	2209.5	2233.8	2253.8	2285.2	2328.1	2378.1	2436.6	2502.3
27.5°	2048.1	2046.7	2056.7	2069.5	2091.0	2115.3	2149.5	2193.8	2246.7	2310.9	2375.2
30°	1905.3	1908.2	1912.5	1925.3	1939.6	1963.9	1998.1	2035.3	2085.3	2146.7	2215.2
32.5°	1808.2	1808.2	1813.9	1822.5	1832.5	1845.3	1869.6	1896.7	1935.3	1978.2	2028.1
35°	1775.3	1769.6	1775.3	1776.8	1778.2	1781.1	1785.3	1793.9	1806.7	1825.3	1843.9
37.5°	1761.1	1756.8	1756.8	1751.1	1743.9	1735.3	1723.9	1711.1	1696.8	1678.2	1663.9
40°	1705.4	1702.5	1699.6	1693.9	1678.2	1661.1	1642.5	1612.5	1579.7	1533.9	1488.3
42.5°	1598.2	1595.4	1593.9	1582.5	1568.2	1548.2	1526.8	1495.4	1454.0	1395.4	1329.7
45°	1465.4	1459.7	1455.4	1445.4	1435.4	1418.3	1398.3	1369.7	1328.3	1268.3	1189.7
47.5°	1311.2	1308.3	1306.9	1302.6	1292.6	1282.6	1269.7	1246.9	1209.7	1152.6	1071.2
50°	1155.5	1149.8	1152.6	1151.2	1146.9	1139.8	1131.2	1115.5	1086.9	1035.5	961.2
52.5°	976.9	976.9	975.5	979.8	981.2	979.8	981.2	964.1	939.8	901.2	838.4
55°	791.2	791.2	795.5	801.3	807.0	808.4	807.0	799.8	782.7	751.3	695.6
57.5°	617.0	614.2	622.7	631.3	637.0	642.7	638.4	632.7	622.7	597.0	554.2
60°	469.9	469.9	475.6	481.3	487.0	492.8	491.3	489.9	481.3	464.2	429.9
62.5°	345.6	347.1	347.1	351.4	357.1	362.8	367.1	362.8	358.5	347.1	324.2
65°	247.1	245.6	247.1	251.4	255.7	261.4	264.2	262.8	258.5	249.9	232.8
67.5°	165.7	164.3	169.9	171.4	174.2	180.0	178.5	180.0	178.5	171.4	157.1
70°	108.5	105.7	108.5	107.1	111.4	112.8	115.7	117.1	115.7	111.4	107.1
72.5°	67.1	65.7	67.1	68.6	70.0	71.4	74.3	74.3	72.8	70.0	64.3
75°	42.8	38.5	40.0	37.1	40.0	40.0	42.8	44.3	42.8	42.8	40.0
77.5°	25.7	25.7	25.7	25.7	25.7	25.7	25.7	27.2	28.6	25.7	24.3
80°	12.9	12.9	14.3	14.3	14.3	15.7	14.3	14.3	14.3	15.7	11.4
82.5°	10.0	8.6	8.6	8.6	10.0	8.6	8.6	8.6	8.6	8.6	8.6
85°	4.3	5.7	4.3	2.9	4.3	4.3	5.7	4.3	4.3	4.3	5.7
87.5°	1.4	1.4	0.0	0.0	0.0	1.4	0.0	1.4	1.4	2.9	0.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8
2.5°	2698.0	2695.1	2695.1	2693.7	2696.6	2693.7	2695.1	2693.7	2693.7	2696.6	2693.7
5°	2708.0	2709.4	2706.6	2705.1	2709.4	2709.4	2709.4	2706.6	2706.6	2708.0	2706.6
7.5°	2722.3	2725.1	2726.5	2728.0	2730.8	2732.3	2732.3	2730.8	2729.4	2733.7	2728.0
10°	2738.0	2742.3	2750.8	2755.1	2762.3	2762.3	2765.1	2765.1	2762.3	2765.1	2763.7
12.5°	2732.3	2758.0	2772.3	2782.3	2792.2	2800.8	2803.7	2805.1	2803.7	2809.4	2803.7
15°	2742.3	2763.7	2786.6	2803.7	2822.2	2832.2	2835.1	2846.5	2849.4	2850.8	2842.3
17.5°	2726.5	2765.1	2789.4	2815.1	2842.3	2860.8	2877.9	2885.1	2886.5	2889.4	2877.9
20°	2690.8	2733.7	2770.8	2808.0	2839.4	2867.9	2882.2	2902.2	2896.5	2908.0	2892.2
22.5°	2642.3	2690.8	2738.0	2786.6	2819.4	2853.7	2883.7	2897.9	2905.1	2905.1	2887.9
25°	2565.2	2622.3	2673.7	2723.7	2773.7	2815.1	2849.4	2870.8	2875.1	2873.7	2853.7
27.5°	2445.2	2506.6	2566.6	2623.7	2685.1	2733.7	2773.7	2799.4	2806.5	2806.5	2785.1
30°	2279.5	2345.2	2403.8	2472.3	2535.2	2589.4	2645.2	2668.0	2680.8	2680.8	2656.6
32.5°	2082.4	2138.1	2192.4	2259.5	2328.1	2389.5	2442.3	2473.7	2489.5	2488.0	2466.6
35°	1868.2	1895.3	1936.7	1986.7	2048.1	2105.3	2156.7	2186.7	2213.8	2212.4	2192.4
37.5°	1653.9	1646.8	1651.1	1669.6	1708.2	1748.2	1788.2	1816.8	1839.6	1849.6	1845.3
40°	1444.0	1406.8	1371.1	1358.3	1361.1	1375.4	1396.8	1418.3	1444.0	1456.8	1462.5
42.5°	1255.4	1192.6	1129.7	1082.6	1055.5	1046.9	1056.9	1064.0	1079.8	1098.3	1116.9
45°	1104.1	1019.8	936.9	864.1	818.4	791.2	785.5	791.2	799.8	818.4	842.7
47.5°	979.8	881.2	788.4	707.0	639.8	604.2	594.2	591.3	599.9	617.0	649.8
50°	869.8	771.3	668.4	574.1	504.2	464.2	449.9	444.2	454.2	467.0	497.0
52.5°	749.8	652.7	547.0	455.6	382.8	341.4	325.6	317.1	322.8	339.9	369.9
55°	619.9	529.9	434.2	339.9	269.9	231.4	212.8	207.1	212.8	231.4	261.4
57.5°	489.9	414.2	334.2	245.6	182.8	144.3	125.7	120.0	135.7	142.8	174.2
60°	382.8	321.4	252.8	180.0	125.7	95.7	77.1	72.8	80.0	92.8	118.5
62.5°	287.1	248.5	194.2	128.5	92.8	61.4	51.4	47.1	51.4	61.4	81.4
65°	208.5	178.5	135.7	94.3	62.8	45.7	34.3	31.4	35.7	42.8	60.0
67.5°	142.8	120.0	94.3	65.7	42.8	28.6	24.3	24.3	25.7	31.4	44.3
70°	92.8	78.6	60.0	42.8	28.6	21.4	18.6	15.7	18.6	22.9	30.0
72.5°	58.6	50.0	38.5	30.0	21.4	15.7	12.9	11.4	14.3	17.1	22.9
75°	35.7	27.2	20.0	15.7	11.4	11.4	11.4	5.7	7.1	11.4	14.3
77.5°	21.4	18.6	15.7	12.9	10.0	5.7	5.7	5.7	7.1	8.6	12.9
80°	11.4	10.0	7.1	7.1	5.7	4.3	5.7	4.3	2.9	7.1	8.6
82.5°	7.1	5.7	5.7	5.7	7.1	2.9	4.3	2.9	4.3	5.7	4.3
85°	4.3	4.3	4.3	2.9	7.1	2.9	2.9	1.4	1.4	2.9	2.9
87.5°	0.0	1.4	1.4	0.0	1.4	0.0	1.4	1.4	1.4	1.4	1.4
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°	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8	2690.8
2.5°	2695.1	2693.7	2695.1	2693.7	2693.7	2693.7	2695.1	2695.1	2693.7	2693.7	2696.6
5°	2706.6	2706.6	2706.6	2705.1	2703.7	2703.7	2706.6	2706.6	2702.3	2706.6	2706.6
7.5°	2730.8	2726.5	2730.8	2725.1	2722.3	2723.7	2725.1	2722.3	2719.4	2720.9	2720.9
10°	2762.3	2758.0	2758.0	2753.7	2749.4	2746.5	2743.7	2736.5	2729.4	2728.0	2722.3
12.5°	2799.4	2792.2	2788.0	2779.4	2772.3	2762.3	2753.7	2742.3	2728.0	2718.0	2708.0
15°	2836.5	2825.1	2815.1	2800.8	2785.1	2768.0	2749.4	2730.8	2708.0	2688.0	2670.8
17.5°	2866.5	2850.8	2832.2	2809.4	2786.6	2760.8	2733.7	2706.6	2673.7	2648.0	2628.0
20°	2876.5	2853.7	2829.4	2799.4	2769.4	2733.7	2699.4	2663.7	2626.6	2599.4	2576.6
22.5°	2863.7	2836.5	2806.5	2775.1	2735.1	2696.6	2656.6	2615.1	2582.3	2545.2	2523.7
25°	2828.0	2795.1	2762.3	2725.1	2686.6	2643.7	2600.9	2558.0	2518.0	2498.0	2470.9
27.5°	2755.1	2719.4	2683.7	2645.2	2600.9	2558.0	2513.8	2472.3	2438.1	2410.9	2395.2
30°	2626.6	2585.2	2543.7	2502.3	2463.7	2419.5	2378.1	2343.8	2309.5	2288.1	2272.4
32.5°	2429.5	2392.3	2350.9	2310.9	2275.2	2238.1	2203.8	2173.8	2149.5	2135.2	2123.8
35°	2163.8	2126.7	2095.3	2066.7	2036.7	2021.0	1999.6	1982.4	1972.4	1966.7	1965.3
37.5°	1829.6	1808.2	1798.2	1792.5	1786.7	1782.5	1785.3	1792.5	1798.2	1808.2	1819.6
40°	1472.5	1491.1	1496.8	1516.8	1535.4	1559.7	1586.8	1618.2	1643.9	1676.8	1699.6
42.5°	1146.9	1181.2	1221.2	1264.0	1309.7	1354.0	1408.3	1458.2	1504.0	1545.4	1581.1
45°	881.2	934.1	994.1	1055.5	1116.9	1181.2	1246.9	1308.3	1362.6	1406.8	1444.0
47.5°	687.0	745.6	822.7	898.4	972.7	1048.3	1121.2	1185.4	1231.2	1274.0	1306.9
50°	544.2	611.3	695.6	782.7	864.1	944.1	1021.2	1081.2	1126.9	1161.2	1185.4
52.5°	421.3	501.3	587.0	678.4	765.6	852.7	924.1	979.8	1016.9	1046.9	1065.5
55°	314.2	392.8	484.2	578.4	667.0	751.3	818.4	867.0	899.8	916.9	926.9
57.5°	227.1	298.5	389.9	484.2	564.2	644.1	698.4	742.7	761.3	771.3	775.5
60°	165.7	231.4	312.8	394.2	469.9	534.2	581.3	611.3	625.6	631.3	629.9
62.5°	121.4	178.5	248.5	317.1	378.5	431.3	468.5	488.5	495.6	498.5	494.2
65°	92.8	137.1	197.1	249.9	297.1	335.6	362.8	375.6	379.9	378.5	375.6
67.5°	68.6	102.8	147.1	187.1	221.4	251.4	265.7	277.1	279.9	275.7	271.4
70°	48.6	75.7	107.1	134.3	160.0	177.1	192.8	194.2	194.2	192.8	190.0
72.5°	34.3	52.8	72.8	91.4	107.1	120.0	125.7	130.0	128.5	127.1	124.3
75°	22.9	32.9	52.8	57.1	71.4	75.7	81.4	81.4	82.8	78.6	78.6
77.5°	14.3	22.9	31.4	37.1	42.8	48.6	51.4	51.4	52.8	51.4	51.4
80°	8.6	14.3	17.1	25.7	25.7	30.0	31.4	32.9	30.0	34.3	30.0
82.5°	5.7	8.6	12.9	12.9	15.7	18.6	18.6	20.0	20.0	18.6	18.6
85°	4.3	5.7	7.1	8.6	8.6	10.0	8.6	8.6	10.0	11.4	10.0
87.5°	1.4	2.9	1.4	2.9	2.9	5.7	4.3	4.3	4.3	5.7	5.7
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: P245513

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2690.8	2690.8	2690.8	2690.8
2.5°	2693.7	2695.1	2693.7	2693.7
5°	2706.6	2705.1	2706.6	2703.7
7.5°	2716.6	2716.6	2715.1	2715.1
10°	2716.6	2710.9	2710.9	2710.9
12.5°	2695.1	2688.0	2683.7	2680.8
15°	2658.0	2645.2	2639.4	2638.0
17.5°	2609.4	2598.0	2590.9	2586.6
20°	2553.7	2542.3	2533.7	2535.2
22.5°	2505.2	2492.3	2486.6	2483.7
25°	2456.6	2440.9	2436.6	2433.8
27.5°	2378.1	2369.5	2365.2	2360.9
30°	2258.1	2253.8	2246.7	2256.6
32.5°	2119.5	2112.4	2106.7	2111.0
35°	1966.7	1962.4	1966.7	1963.9
37.5°	1826.8	1831.0	1836.8	1839.6
40°	1716.8	1732.5	1738.2	1741.0
42.5°	1606.8	1625.4	1636.8	1643.9
45°	1471.1	1489.7	1502.5	1511.1
47.5°	1331.1	1346.9	1359.7	1358.3
50°	1204.0	1212.6	1218.3	1224.0
52.5°	1075.5	1075.5	1076.9	1076.9
55°	929.8	926.9	925.5	926.9
57.5°	769.8	767.0	765.6	761.3
60°	624.2	615.6	609.9	609.9
62.5°	488.5	478.5	474.2	472.8
65°	367.1	365.6	357.1	355.6
67.5°	265.7	259.9	254.2	255.7
70°	187.1	178.5	178.5	175.7
72.5°	121.4	117.1	115.7	115.7
75°	75.7	75.7	72.8	78.6
77.5°	50.0	50.0	48.6	50.0
80°	30.0	30.0	30.0	28.6
82.5°	18.6	20.0	18.6	18.6
85°	10.0	11.4	8.6	12.9
87.5°	5.7	7.1	5.7	7.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)