

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: P245399

Luminaire Tested: **LSR8B50D010 EC8B50835 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B50D010 EC8B50835 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5612.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

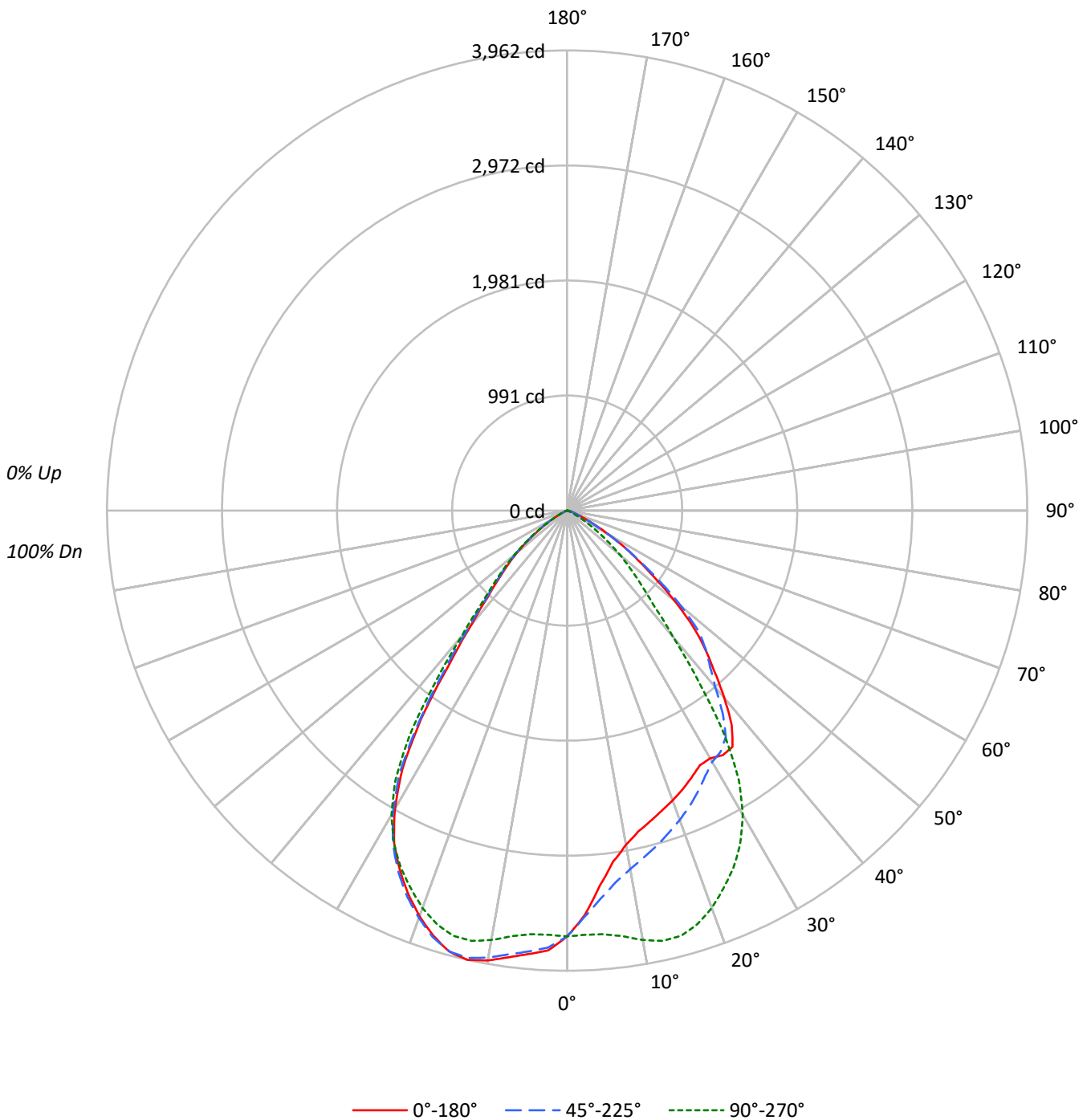
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	113052	113052	113052
5°	100304	113335	118644
10°	91450	117542	123150
15°	88379	120976	125497
20°	87118	119487	121952
25°	86261	115366	116087
30°	87667	107664	105674
35°	93444	89096	82640
40°	84686	57040	51650
45°	73093	39026	36335
50°	57673	28467	26802
55°	40031	17505	16467
60°	25483	8850	7900
65°	12725	3517	2671
70°	7032	1740	956
75°	5052	1263	465
80°	4102	852	178
85°	4423	672	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.7	6.1
10°-20°	986.9	17.6
20°-30°	1432.5	25.5
30°-40°	1410.8	25.1
40°-50°	884.4	15.8
50°-60°	426.8	7.6
60°-70°	103.3	1.8
70°-80°	20.9	0.4
80°-90°	4.8	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°	2761.1	49.2
0°-40°	4171.9	74.3
0°-60°	5483.1	97.7
0°-90°	5612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5612.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3666	3666	3666	3666	3666	
5°	3240	3350	3661	3810	3833	300
15°	2768	2986	3790	3928	3931	783
25°	2535	2667	3391	3437	3412	1173
35°	2482	2381	2367	2232	2195	1502
45°	1676	1688	895	857	833	1281
55°	745	769	326	322	306	685
65°	174	172	48	41	37	199
75°	42	37	11	5	4	48
85°	12	10	2	0	0	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2
2.5°	3485.1	3463.0	3421.5	3471.6	3471.6	3443.7	3499.6	3465.8	3492.8	3535.2	3497.6
5°	3240.4	3222.1	3187.5	3240.4	3247.2	3221.2	3288.6	3263.6	3303.1	3355.1	3350.3
7.5°	3046.8	3023.7	2991.9	3046.8	3057.4	3040.1	3104.6	3093.1	3145.1	3212.5	3224.1
10°	2920.6	2896.6	2868.6	2918.7	2926.4	2914.9	2980.4	2973.6	3024.7	3102.7	3133.5
12.5°	2831.1	2810.8	2780.0	2833.0	2841.6	2825.3	2886.9	2884.0	2937.0	3018.9	3057.4
15°	2768.4	2744.4	2716.4	2761.7	2773.3	2755.0	2813.7	2807.9	2861.9	2942.8	2986.1
17.5°	2709.7	2687.5	2658.6	2701.0	2712.6	2693.3	2751.1	2741.5	2787.7	2864.8	2909.1
20°	2654.8	2630.7	2604.7	2648.0	2654.8	2632.6	2690.4	2677.9	2719.3	2790.6	2833.9
22.5°	2597.9	2572.9	2545.9	2588.3	2595.0	2572.9	2625.9	2611.4	2650.0	2714.5	2754.0
25°	2535.3	2512.2	2485.2	2524.7	2530.5	2506.4	2562.3	2544.0	2577.7	2634.5	2667.3
27.5°	2472.7	2450.6	2420.7	2461.2	2464.0	2440.9	2492.0	2466.9	2494.9	2546.9	2574.8
30°	2462.1	2437.1	2406.2	2439.0	2440.0	2410.1	2458.3	2428.4	2443.8	2482.3	2498.7
32.5°	2495.8	2470.8	2439.0	2466.0	2463.1	2430.3	2476.6	2440.0	2444.8	2465.0	2461.2
35°	2482.3	2452.5	2414.9	2443.8	2443.8	2404.3	2450.6	2407.2	2402.4	2405.3	2381.2
37.5°	2329.2	2306.1	2270.4	2298.4	2295.5	2265.6	2301.3	2265.6	2249.2	2242.5	2199.1
40°	2103.8	2075.8	2048.9	2078.7	2081.6	2049.8	2096.1	2055.6	2050.8	2031.5	1980.5
42.5°	1875.5	1865.9	1839.8	1864.9	1878.4	1851.4	1889.9	1870.7	1873.6	1868.7	1820.6
45°	1676.1	1659.7	1640.4	1669.3	1678.0	1664.5	1703.1	1691.5	1703.1	1727.1	1687.6
47.5°	1461.3	1444.9	1423.7	1454.5	1470.0	1444.9	1477.7	1473.8	1491.1	1532.6	1528.7
50°	1202.2	1190.6	1186.7	1190.6	1200.2	1188.7	1211.8	1212.8	1224.3	1281.1	1285.0
52.5°	951.7	948.8	935.3	947.9	947.9	929.6	952.7	942.1	953.6	992.2	1017.2
55°	744.6	741.7	733.0	744.6	732.1	725.3	732.1	721.5	712.8	742.7	768.7
57.5°	579.9	570.3	559.7	564.5	563.5	549.1	556.8	544.2	537.5	548.1	571.2
60°	413.2	410.4	400.7	405.5	409.4	398.8	406.5	400.7	389.2	397.8	398.8
62.5°	274.5	276.5	270.7	271.6	268.8	266.8	271.6	274.5	271.6	267.8	268.8
65°	174.4	173.4	172.4	173.4	175.3	171.5	174.4	176.3	173.4	173.4	172.4
67.5°	115.6	112.7	109.8	111.7	113.7	110.8	113.7	112.7	113.7	112.7	109.8
70°	78.0	77.1	76.1	77.1	77.1	75.1	77.1	76.1	77.1	76.1	73.2
72.5°	56.8	56.8	55.9	56.8	56.8	54.9	55.9	53.9	54.9	53.9	52.0
75°	42.4	42.4	41.4	42.4	41.4	40.5	41.4	40.5	38.5	38.5	36.6
77.5°	30.8	30.8	30.8	30.8	30.8	29.9	29.9	28.9	27.9	27.0	27.0
80°	23.1	22.2	22.2	22.2	22.2	21.2	22.2	21.2	20.2	19.3	18.3
82.5°	16.4	17.3	16.4	16.4	16.4	15.4	16.4	15.4	15.4	14.4	12.5
85°	12.5	12.5	12.5	12.5	12.5	11.6	11.6	11.6	10.6	10.6	9.6
87.5°	6.7	6.7	6.7	7.7	6.7	6.7	6.7	5.8	5.8	4.8	4.8
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2
2.5°	3547.7	3552.5	3541.9	3558.3	3621.9	3570.8	3592.0	3598.8	3646.9	3655.6	3649.8
5°	3412.9	3434.1	3447.5	3484.1	3554.5	3517.9	3555.4	3579.5	3641.2	3661.4	3666.2
7.5°	3306.9	3351.2	3384.0	3443.7	3526.5	3498.6	3555.4	3594.9	3670.1	3696.1	3708.6
10°	3227.9	3295.3	3352.2	3434.1	3527.5	3509.2	3583.4	3639.2	3723.0	3753.9	3769.3
12.5°	3168.2	3250.1	3326.2	3430.2	3531.3	3522.7	3612.3	3675.8	3764.5	3795.3	3813.6
15°	3102.7	3197.1	3285.7	3402.3	3511.1	3509.2	3605.5	3672.9	3763.5	3789.5	3806.8
17.5°	3024.7	3125.8	3223.1	3349.3	3457.2	3459.1	3556.4	3622.9	3711.5	3732.7	3744.2
20°	2945.7	3045.9	3143.2	3273.2	3379.2	3382.0	3477.4	3539.1	3623.8	3641.2	3644.1
22.5°	2861.9	2955.3	3052.6	3181.7	3283.8	3285.7	3380.1	3437.9	3510.2	3518.8	3526.5
25°	2766.5	2858.0	2949.5	3077.6	3174.9	3180.7	3266.4	3317.5	3384.0	3390.7	3393.6
27.5°	2667.3	2742.4	2830.1	2939.9	3038.2	3034.3	3115.2	3173.0	3232.7	3228.9	3227.9
30°	2567.1	2629.7	2683.7	2789.6	2861.9	2864.8	2940.9	2968.8	3031.4	3023.7	3022.7
32.5°	2496.8	2513.2	2527.6	2581.6	2650.0	2625.9	2677.9	2712.6	2755.9	2753.0	2754.0
35°	2367.7	2337.9	2294.5	2302.2	2343.6	2306.1	2334.0	2333.0	2377.4	2366.8	2379.3
37.5°	2147.1	2062.4	1966.0	1911.1	1918.8	1871.6	1862.0	1885.1	1900.5	1870.7	1881.3
40°	1912.1	1786.9	1636.6	1511.4	1504.6	1445.9	1435.3	1412.2	1442.0	1417.0	1424.7
42.5°	1738.7	1573.0	1375.5	1223.4	1190.6	1141.5	1112.6	1108.7	1117.4	1100.1	1095.2
45°	1605.8	1429.5	1203.1	1028.8	992.2	939.2	910.3	899.7	900.7	894.9	890.1
47.5°	1449.7	1272.5	1043.2	865.0	823.6	773.5	744.6	737.9	741.7	734.0	728.2
50°	1233.9	1075.0	866.0	703.2	666.6	630.0	606.9	600.1	599.2	593.4	589.5
52.5°	1001.8	869.8	688.7	552.9	520.2	484.5	468.1	459.5	460.4	454.7	448.9
55°	775.4	693.6	533.7	418.1	388.2	360.3	344.9	334.3	331.4	325.6	322.7
57.5°	577.0	522.1	399.8	301.5	284.2	257.2	241.8	229.3	227.3	224.4	223.5
60°	404.6	365.1	281.3	214.8	194.6	178.2	162.8	150.3	144.5	143.5	140.6
62.5°	262.0	237.9	184.9	143.5	128.1	116.6	101.1	92.5	88.6	84.8	85.7
65°	162.8	144.5	115.6	92.5	83.8	75.1	63.6	55.9	52.0	48.2	49.1
67.5°	101.1	90.5	73.2	59.7	53.9	47.2	38.5	32.8	29.9	27.0	25.0
70°	68.4	58.8	50.1	42.4	38.5	33.7	27.9	23.1	21.2	19.3	17.3
72.5°	48.2	43.3	36.6	31.8	28.9	25.0	21.2	18.3	16.4	14.4	12.5
75°	34.7	30.8	27.0	23.1	21.2	19.3	16.4	14.4	12.5	10.6	8.7
77.5°	25.0	22.2	19.3	17.3	16.4	13.5	11.6	10.6	9.6	7.7	5.8
80°	17.3	15.4	12.5	11.6	11.6	9.6	8.7	7.7	6.7	4.8	3.9
82.5°	11.6	10.6	9.6	8.7	7.7	6.7	6.7	4.8	3.9	2.9	1.9
85°	8.7	7.7	6.7	5.8	5.8	4.8	3.9	2.9	2.9	1.9	1.0
87.5°	4.8	4.8	3.9	2.9	2.9	1.9	1.9	1.0	1.0	1.0	1.0
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2
2.5°	3699.0	3701.8	3718.2	3705.7	3737.5	3760.6	3749.0	3775.1	3766.4	3764.5	3794.3
5°	3724.0	3730.7	3752.9	3741.3	3776.0	3801.1	3789.5	3818.4	3809.7	3807.8	3838.6
7.5°	3772.2	3778.9	3798.2	3788.5	3825.1	3847.3	3832.9	3864.6	3853.1	3852.1	3882.0
10°	3832.9	3842.5	3858.9	3849.2	3882.9	3902.2	3887.8	3918.6	3908.0	3903.2	3935.9
12.5°	3878.1	3884.9	3901.2	3893.5	3926.3	3940.7	3928.2	3958.1	3944.6	3940.7	3969.6
15°	3867.5	3874.3	3887.8	3881.0	3911.8	3925.3	3908.9	3941.7	3928.2	3920.5	3946.5
17.5°	3800.1	3804.0	3813.6	3806.8	3839.6	3848.3	3830.0	3862.7	3850.2	3836.7	3861.7
20°	3700.9	3699.0	3704.7	3701.8	3728.8	3733.6	3722.1	3746.2	3731.7	3724.0	3738.5
22.5°	3577.6	3575.7	3579.5	3571.8	3598.8	3601.7	3584.3	3613.2	3598.8	3584.3	3608.4
25°	3440.8	3430.2	3428.3	3431.2	3449.5	3452.4	3434.1	3455.2	3436.9	3425.4	3448.5
27.5°	3272.2	3258.7	3255.9	3258.7	3277.0	3263.6	3248.1	3263.6	3245.3	3234.7	3249.1
30°	3064.2	3044.9	3036.2	3030.4	3049.7	3044.9	3009.3	3026.6	2997.7	2982.3	2992.9
32.5°	2783.9	2773.3	2750.1	2736.7	2755.0	2718.3	2696.2	2696.2	2684.6	2658.6	2664.4
35°	2394.7	2378.3	2357.1	2345.6	2348.5	2299.3	2262.7	2270.4	2231.9	2225.2	2228.0
37.5°	1902.5	1875.5	1867.8	1843.7	1849.5	1806.1	1756.0	1757.0	1736.8	1715.6	1708.8
40°	1429.5	1424.7	1417.0	1396.7	1404.4	1357.2	1338.0	1338.9	1325.5	1310.0	1317.8
42.5°	1104.9	1089.5	1084.6	1077.9	1079.8	1072.1	1047.1	1050.0	1038.4	1034.6	1030.7
45°	897.8	881.4	869.8	875.6	875.6	866.9	857.3	863.1	857.3	849.6	853.5
47.5°	739.8	724.4	718.6	717.6	724.4	718.6	709.0	710.9	709.9	707.0	705.1
50°	590.5	586.6	581.8	578.9	581.8	579.9	571.2	576.0	578.9	569.3	572.2
52.5°	449.8	449.8	448.9	442.1	447.9	442.1	441.2	443.1	440.2	436.4	435.4
55°	329.4	326.5	321.7	320.8	322.7	320.8	318.8	319.8	321.7	312.1	312.1
57.5°	225.4	223.5	220.6	220.6	224.4	219.6	216.7	220.6	216.7	212.9	212.9
60°	144.5	143.5	140.6	140.6	140.6	139.7	136.8	137.7	139.7	133.9	134.9
62.5°	86.7	83.8	82.8	81.9	82.8	81.9	81.9	80.9	80.0	80.0	77.1
65°	47.2	45.3	43.3	44.3	44.3	43.3	43.3	43.3	41.4	40.5	39.5
67.5°	24.1	22.2	22.2	21.2	21.2	21.2	21.2	20.2	20.2	20.2	19.3
70°	15.4	14.4	13.5	13.5	13.5	12.5	12.5	12.5	12.5	12.5	11.6
72.5°	10.6	9.6	8.7	8.7	8.7	7.7	7.7	7.7	7.7	6.7	6.7
75°	7.7	6.7	5.8	5.8	5.8	4.8	4.8	4.8	4.8	4.8	4.8
77.5°	4.8	3.9	3.9	3.9	3.9	2.9	2.9	2.9	2.9	2.9	1.9
80°	2.9	2.9	1.9	1.9	1.9	1.9	1.0	1.0	1.0	1.0	1.0
82.5°	1.9	1.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



TEST NUMBER: P245399

CATALOG NUMBER: LSR8B50D010 EC8B50835 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2	3666.2
2.5°	3783.7	3776.0	3780.8	3816.5	3801.1	3796.2	3755.8	3791.4
5°	3829.0	3823.2	3823.2	3863.7	3845.4	3841.5	3802.0	3832.9
7.5°	3871.4	3865.6	3866.6	3908.0	3893.5	3887.8	3848.3	3879.1
10°	3926.3	3922.4	3923.4	3962.9	3947.5	3941.7	3901.2	3933.0
12.5°	3959.0	3953.3	3953.3	3995.6	3978.3	3969.6	3931.1	3961.9
15°	3934.0	3925.3	3925.3	3967.7	3948.4	3935.9	3902.2	3931.1
17.5°	3848.3	3839.6	3839.6	3876.2	3861.7	3843.4	3808.8	3835.7
20°	3728.8	3718.2	3715.3	3757.7	3737.5	3721.1	3690.3	3716.3
22.5°	3594.0	3589.1	3580.5	3622.9	3604.6	3587.2	3554.5	3574.7
25°	3432.1	3424.4	3415.8	3457.2	3438.9	3421.5	3395.5	3411.9
27.5°	3230.8	3231.8	3227.0	3259.7	3241.4	3231.8	3200.0	3227.0
30°	2987.1	2976.5	2972.7	3011.2	2993.8	2981.3	2941.8	2967.8
32.5°	2669.2	2653.8	2633.6	2676.9	2647.1	2636.5	2602.8	2640.3
35°	2206.9	2202.0	2183.7	2220.3	2204.0	2184.7	2163.5	2195.3
37.5°	1706.0	1709.8	1707.9	1717.5	1707.9	1695.4	1672.2	1660.7
40°	1302.3	1292.7	1285.0	1302.3	1282.1	1282.1	1268.6	1283.1
42.5°	1021.1	1017.2	1026.8	1030.7	1019.1	1017.2	1015.3	1014.3
45°	842.9	842.9	844.8	848.6	844.8	842.9	837.1	833.2
47.5°	694.5	698.4	694.5	707.0	700.3	698.4	686.8	691.6
50°	562.5	557.7	562.5	566.4	567.4	561.6	555.8	558.7
52.5°	436.4	428.7	426.7	432.5	428.7	428.7	424.8	423.8
55°	307.3	310.2	305.4	310.2	308.2	305.4	302.5	306.3
57.5°	208.1	209.0	207.1	210.0	205.2	206.1	205.2	204.2
60°	134.9	131.0	131.0	133.9	129.1	129.1	128.1	128.1
62.5°	77.1	76.1	76.1	75.1	74.2	74.2	74.2	72.2
65°	39.5	38.5	37.6	37.6	37.6	37.6	36.6	36.6
67.5°	19.3	18.3	18.3	19.3	18.3	18.3	18.3	18.3
70°	11.6	11.6	10.6	11.6	10.6	10.6	10.6	10.6
72.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
75°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
80°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)