

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: P245435

Luminaire Tested: **LSR8B50D010 EC8B50940 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245435
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 EC8B50940 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4998.0 lumens
Efficiency: N/A
Efficacy: 94.3 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

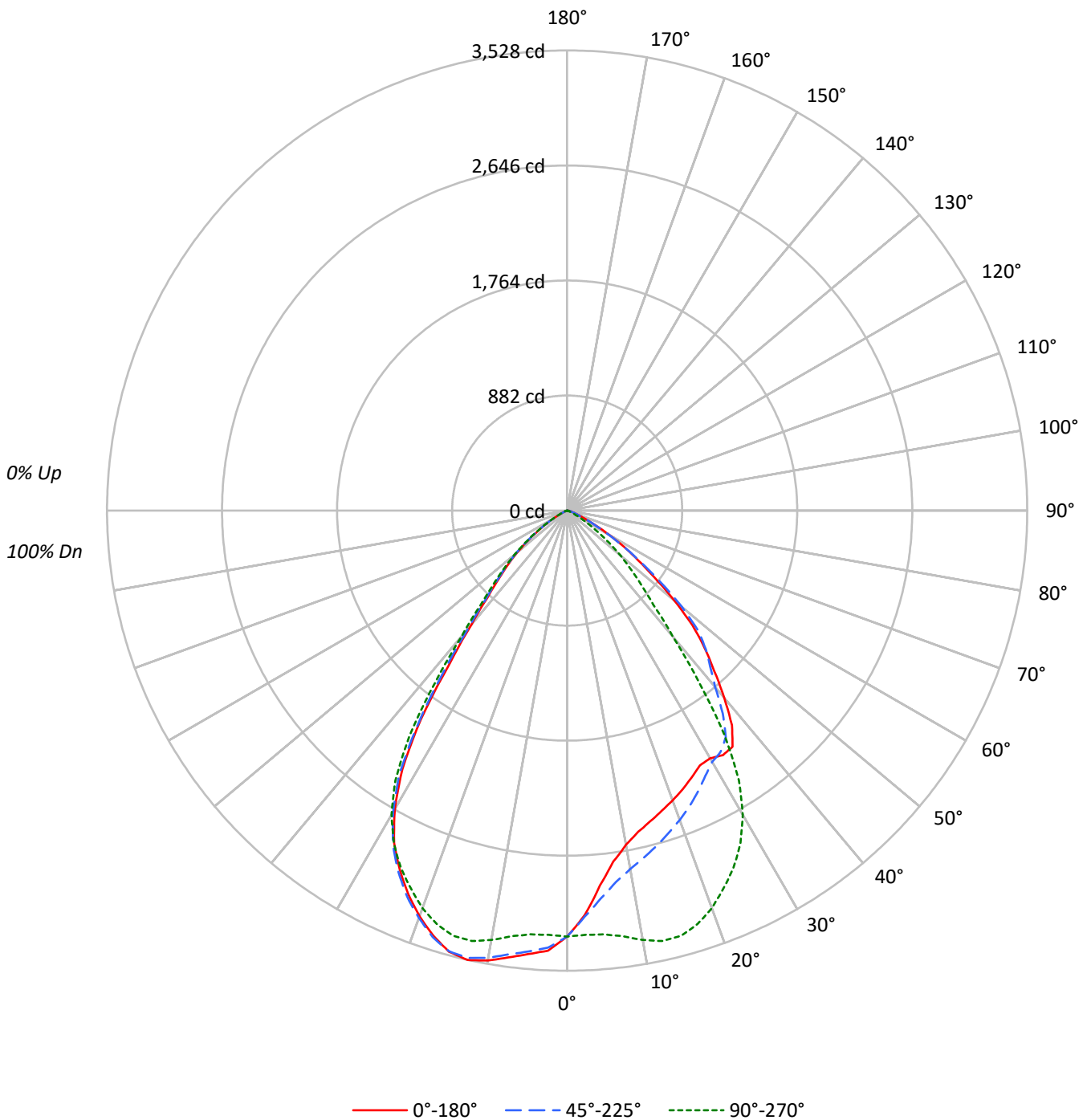
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	100684	100684	100684
5°	89330	100935	105662
10°	81446	104682	109677
15°	78709	107741	111766
20°	77585	106414	108609
25°	76823	102743	103386
30°	78075	95885	94112
35°	83224	79346	73598
40°	75420	50796	45998
45°	65095	34756	32362
50°	51360	25354	23871
55°	35649	15591	14666
60°	22696	7882	7037
65°	11331	3130	2379
70°	6266	1551	847
75°	4492	1120	405
80°	3658	764	160
85°	3963	601	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.3	6.1
10°-20°	879.0	17.6
20°-30°	1275.7	25.5
30°-40°	1256.5	25.1
40°-50°	787.6	15.8
50°-60°	380.1	7.6
60°-70°	92.0	1.8
70°-80°	18.6	0.4
80°-90°	4.3	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°	2459.0	49.2
0°-40°	3715.5	74.3
0°-60°	4883.2	97.7
0°-90°	4998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4998.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3265	3265	3265	3265	3265	
5°	2886	2984	3261	3393	3414	267
15°	2466	2659	3375	3498	3501	697
25°	2258	2376	3020	3061	3039	1045
35°	2211	2121	2108	1988	1955	1338
45°	1493	1503	797	764	742	1141
55°	663	685	290	286	273	610
65°	155	154	43	37	33	177
75°	38	33	9	4	3	42
85°	11	9	2	0	0	11
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°	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1
2.5°	3103.8	3084.1	3047.2	3091.8	3091.8	3066.9	3116.7	3086.7	3110.7	3148.4	3115.0
5°	2885.9	2869.6	2838.7	2885.9	2891.9	2868.8	2928.8	2906.5	2941.7	2988.0	2983.7
7.5°	2713.5	2692.9	2664.6	2713.5	2722.9	2707.5	2764.9	2754.7	2801.0	2861.0	2871.3
10°	2601.1	2579.6	2554.8	2599.4	2606.2	2595.9	2654.3	2648.3	2693.7	2763.2	2790.7
12.5°	2521.3	2503.3	2475.8	2523.0	2530.7	2516.2	2571.1	2568.5	2615.7	2688.6	2722.9
15°	2465.5	2444.1	2419.2	2459.5	2469.8	2453.5	2505.9	2500.7	2548.8	2620.8	2659.4
17.5°	2413.2	2393.5	2367.7	2405.5	2415.8	2398.6	2450.1	2441.5	2482.7	2551.3	2590.8
20°	2364.3	2342.9	2319.7	2358.3	2364.3	2344.6	2396.1	2384.9	2421.8	2485.3	2523.9
22.5°	2313.7	2291.4	2267.4	2305.1	2311.1	2291.4	2338.6	2325.7	2360.0	2417.5	2452.7
25°	2257.9	2237.4	2213.3	2248.5	2253.7	2232.2	2282.0	2265.7	2295.7	2346.3	2375.5
27.5°	2202.2	2182.4	2155.9	2191.9	2194.5	2173.9	2219.3	2197.0	2221.9	2268.2	2293.1
30°	2192.7	2170.4	2143.0	2172.2	2173.0	2146.4	2189.3	2162.7	2176.4	2210.8	2225.3
32.5°	2222.8	2200.5	2172.2	2196.2	2193.6	2164.4	2205.6	2173.0	2177.3	2195.3	2191.9
35°	2210.8	2184.2	2150.7	2176.4	2176.4	2141.3	2182.4	2143.8	2139.6	2142.1	2120.7
37.5°	2074.4	2053.8	2022.0	2046.9	2044.3	2017.7	2049.5	2017.7	2003.2	1997.1	1958.5
40°	1873.6	1848.7	1824.7	1851.3	1853.9	1825.6	1866.7	1830.7	1826.4	1809.3	1763.8
42.5°	1670.3	1661.7	1638.6	1660.9	1672.9	1648.8	1683.2	1666.0	1668.6	1664.3	1621.4
45°	1492.7	1478.1	1461.0	1486.7	1494.4	1482.4	1516.7	1506.4	1516.7	1538.2	1503.0
47.5°	1301.4	1286.8	1267.9	1295.4	1309.1	1286.8	1316.0	1312.6	1328.0	1364.9	1361.5
50°	1070.6	1060.3	1056.9	1060.3	1068.9	1058.6	1079.2	1080.1	1090.4	1141.0	1144.4
52.5°	847.6	845.0	833.0	844.2	844.2	827.9	848.4	839.0	849.3	883.6	905.9
55°	663.1	660.6	652.8	663.1	652.0	646.0	652.0	642.6	634.8	661.4	684.6
57.5°	516.4	507.9	498.4	502.7	501.9	489.0	495.9	484.7	478.7	488.1	508.7
60°	368.0	365.5	356.9	361.2	364.6	355.2	362.0	356.9	346.6	354.3	355.2
62.5°	244.5	246.2	241.1	241.9	239.3	237.6	241.9	244.5	241.9	238.5	239.3
65°	155.3	154.4	153.6	154.4	156.1	152.7	155.3	157.0	154.4	154.4	153.6
67.5°	102.9	100.4	97.8	99.5	101.2	98.7	101.2	100.4	101.2	100.4	97.8
70°	69.5	68.6	67.8	68.6	68.6	66.9	68.6	67.8	68.6	67.8	65.2
72.5°	50.6	50.6	49.8	50.6	50.6	48.9	49.8	48.0	48.9	48.0	46.3
75°	37.7	37.7	36.9	37.7	36.9	36.0	36.9	36.0	34.3	34.3	32.6
77.5°	27.5	27.5	27.5	27.5	27.5	26.6	26.6	25.7	24.9	24.0	24.0
80°	20.6	19.7	19.7	19.7	19.7	18.9	19.7	18.9	18.0	17.2	16.3
82.5°	14.6	15.4	14.6	14.6	14.6	13.7	14.6	13.7	13.7	12.9	11.2
85°	11.2	11.2	11.2	11.2	11.2	10.3	10.3	10.3	9.4	9.4	8.6
87.5°	6.0	6.0	6.0	6.9	6.0	6.0	6.0	5.1	5.1	4.3	4.3
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1
2.5°	3159.6	3163.9	3154.4	3169.0	3225.6	3180.2	3199.0	3205.0	3247.9	3255.7	3250.5
5°	3039.5	3058.3	3070.4	3103.0	3165.6	3133.0	3166.4	3187.9	3242.8	3260.8	3265.1
7.5°	2945.1	2984.6	3013.7	3066.9	3140.7	3115.8	3166.4	3201.6	3268.5	3291.7	3302.8
10°	2874.8	2934.8	2985.4	3058.3	3141.6	3125.3	3191.3	3241.1	3315.7	3343.2	3356.9
12.5°	2821.6	2894.5	2962.3	3054.9	3145.0	3137.3	3217.1	3273.7	3352.6	3380.0	3396.3
15°	2763.2	2847.3	2926.2	3030.0	3127.0	3125.3	3211.0	3271.1	3351.7	3374.9	3390.3
17.5°	2693.7	2783.8	2870.5	2982.8	3078.9	3080.6	3167.3	3226.5	3305.4	3324.3	3334.6
20°	2623.4	2712.6	2799.3	2915.1	3009.4	3012.0	3096.9	3151.9	3227.3	3242.8	3245.4
22.5°	2548.8	2632.0	2718.6	2833.6	2924.5	2926.2	3010.3	3061.8	3126.1	3133.8	3140.7
25°	2463.8	2545.3	2626.8	2740.9	2827.6	2832.7	2909.1	2954.5	3013.7	3019.7	3022.3
27.5°	2375.5	2442.4	2520.5	2618.3	2705.8	2702.3	2774.4	2825.9	2879.0	2875.6	2874.8
30°	2286.3	2342.0	2390.1	2484.4	2548.8	2551.3	2619.1	2644.0	2699.7	2692.9	2692.0
32.5°	2223.6	2238.2	2251.1	2299.1	2360.0	2338.6	2384.9	2415.8	2454.4	2451.8	2452.7
35°	2108.7	2082.1	2043.5	2050.3	2087.2	2053.8	2078.6	2077.8	2117.2	2107.8	2119.0
37.5°	1912.2	1836.7	1750.9	1702.0	1708.9	1666.9	1658.3	1678.9	1692.6	1666.0	1675.4
40°	1702.9	1591.4	1457.5	1346.0	1340.0	1287.7	1278.2	1257.7	1284.2	1261.9	1268.8
42.5°	1548.5	1400.9	1225.1	1089.5	1060.3	1016.6	990.9	987.4	995.1	979.7	975.4
45°	1430.1	1273.1	1071.5	916.2	883.6	836.4	810.7	801.3	802.1	797.0	792.7
47.5°	1291.1	1133.3	929.1	770.4	733.5	688.9	663.1	657.1	660.6	653.7	648.6
50°	1098.9	957.4	771.2	626.3	593.7	561.1	540.5	534.5	533.6	528.5	525.0
52.5°	892.2	774.7	613.4	492.4	463.3	431.5	416.9	409.2	410.1	404.9	399.8
55°	690.6	617.7	475.3	372.3	345.7	320.8	307.1	297.7	295.1	290.0	287.4
57.5°	513.9	465.0	356.0	268.5	253.1	229.1	215.3	204.2	202.5	199.9	199.0
60°	360.3	325.1	250.5	191.3	173.3	158.7	145.0	133.8	128.7	127.8	125.3
62.5°	233.3	211.9	164.7	127.8	114.1	103.8	90.1	82.4	78.9	75.5	76.4
65°	145.0	128.7	102.9	82.4	74.6	66.9	56.6	49.8	46.3	42.9	43.8
67.5°	90.1	80.6	65.2	53.2	48.0	42.0	34.3	29.2	26.6	24.0	22.3
70°	60.9	52.3	44.6	37.7	34.3	30.0	24.9	20.6	18.9	17.2	15.4
72.5°	42.9	38.6	32.6	28.3	25.7	22.3	18.9	16.3	14.6	12.9	11.2
75°	30.9	27.5	24.0	20.6	18.9	17.2	14.6	12.9	11.2	9.4	7.7
77.5°	22.3	19.7	17.2	15.4	14.6	12.0	10.3	9.4	8.6	6.9	5.1
80°	15.4	13.7	11.2	10.3	10.3	8.6	7.7	6.9	6.0	4.3	3.4
82.5°	10.3	9.4	8.6	7.7	6.9	6.0	6.0	4.3	3.4	2.6	1.7
85°	7.7	6.9	6.0	5.1	5.1	4.3	3.4	2.6	2.6	1.7	0.9
87.5°	4.3	4.3	3.4	2.6	2.6	1.7	1.7	0.9	0.9	0.9	0.9
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1
2.5°	3294.3	3296.8	3311.4	3300.3	3328.6	3349.2	3338.9	3362.0	3354.3	3352.6	3379.2
5°	3316.6	3322.6	3342.3	3332.0	3362.9	3385.2	3374.9	3400.6	3392.9	3391.2	3418.7
7.5°	3359.5	3365.5	3382.6	3374.0	3406.6	3426.4	3413.5	3441.8	3431.5	3430.7	3457.3
10°	3413.5	3422.1	3436.7	3428.1	3458.1	3475.3	3462.4	3489.9	3480.4	3476.1	3505.3
12.5°	3453.8	3459.8	3474.4	3467.6	3496.7	3509.6	3498.4	3525.0	3513.0	3509.6	3535.3
15°	3444.4	3450.4	3462.4	3456.4	3483.9	3495.9	3481.3	3510.4	3498.4	3491.6	3514.7
17.5°	3384.3	3387.8	3396.3	3390.3	3419.5	3427.2	3410.9	3440.1	3428.9	3416.9	3439.2
20°	3296.0	3294.3	3299.4	3296.8	3320.9	3325.1	3314.8	3336.3	3323.4	3316.6	3329.4
22.5°	3186.2	3184.5	3187.9	3181.0	3205.0	3207.6	3192.2	3217.9	3205.0	3192.2	3213.6
25°	3064.3	3054.9	3053.2	3055.8	3072.1	3074.6	3058.3	3077.2	3060.9	3050.6	3071.2
27.5°	2914.2	2902.2	2899.6	2902.2	2918.5	2906.5	2892.8	2906.5	2890.2	2880.8	2893.6
30°	2728.9	2711.8	2704.0	2698.9	2716.0	2711.8	2680.0	2695.5	2669.7	2656.0	2665.4
32.5°	2479.3	2469.8	2449.2	2437.2	2453.5	2420.9	2401.2	2401.2	2390.9	2367.7	2372.9
35°	2132.7	2118.1	2099.2	2088.9	2091.5	2047.8	2015.2	2022.0	1987.7	1981.7	1984.3
37.5°	1694.3	1670.3	1663.4	1642.0	1647.1	1608.5	1563.9	1564.8	1546.8	1527.9	1521.9
40°	1273.1	1268.8	1261.9	1243.9	1250.8	1208.8	1191.6	1192.5	1180.4	1166.7	1173.6
42.5°	984.0	970.3	966.0	960.0	961.7	954.8	932.5	935.1	924.8	921.4	917.9
45°	799.5	785.0	774.7	779.8	779.8	772.1	763.5	768.7	763.5	756.7	760.1
47.5°	658.9	645.1	640.0	639.1	645.1	640.0	631.4	633.1	632.3	629.7	628.0
50°	525.9	522.4	518.2	515.6	518.2	516.4	508.7	513.0	515.6	507.0	509.6
52.5°	400.6	400.6	399.8	393.8	398.9	393.8	392.9	394.6	392.1	388.6	387.8
55°	293.4	290.8	286.5	285.7	287.4	285.7	284.0	284.8	286.5	278.0	278.0
57.5°	200.7	199.0	196.5	196.5	199.9	195.6	193.0	196.5	193.0	189.6	189.6
60°	128.7	127.8	125.3	125.3	125.3	124.4	121.8	122.7	124.4	119.2	120.1
62.5°	77.2	74.6	73.8	72.9	73.8	72.9	72.9	72.1	71.2	71.2	68.6
65°	42.0	40.3	38.6	39.5	39.5	38.6	38.6	38.6	36.9	36.0	35.2
67.5°	21.4	19.7	19.7	18.9	18.9	18.9	18.9	18.0	18.0	18.0	17.2
70°	13.7	12.9	12.0	12.0	12.0	11.2	11.2	11.2	11.2	11.2	10.3
72.5°	9.4	8.6	7.7	7.7	7.7	6.9	6.9	6.9	6.9	6.0	6.0
75°	6.9	6.0	5.1	5.1	5.1	4.3	4.3	4.3	4.3	4.3	4.3
77.5°	4.3	3.4	3.4	3.4	3.4	2.6	2.6	2.6	2.6	2.6	1.7
80°	2.6	2.6	1.7	1.7	1.7	1.7	0.9	0.9	0.9	0.9	0.9
82.5°	1.7	1.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
85°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0
87.5°	0.9	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: P245435

CATALOG NUMBER: LSR8B50D010 EC8B50940 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1	3265.1
2.5°	3369.8	3362.9	3367.2	3398.9	3385.2	3380.9	3344.9	3376.6
5°	3410.1	3404.9	3404.9	3441.0	3424.7	3421.2	3386.1	3413.5
7.5°	3447.8	3442.7	3443.5	3480.4	3467.6	3462.4	3427.2	3454.7
10°	3496.7	3493.3	3494.1	3529.3	3515.6	3510.4	3474.4	3502.7
12.5°	3525.9	3520.7	3520.7	3558.5	3543.0	3535.3	3501.0	3528.5
15°	3503.6	3495.9	3495.9	3533.6	3516.5	3505.3	3475.3	3501.0
17.5°	3427.2	3419.5	3419.5	3452.1	3439.2	3422.9	3392.1	3416.1
20°	3320.9	3311.4	3308.8	3346.6	3328.6	3314.0	3286.5	3309.7
22.5°	3200.8	3196.5	3188.7	3226.5	3210.2	3194.7	3165.6	3183.6
25°	3056.6	3049.8	3042.0	3078.9	3062.6	3047.2	3024.0	3038.6
27.5°	2877.3	2878.2	2873.9	2903.1	2886.8	2878.2	2849.9	2873.9
30°	2660.3	2650.8	2647.4	2681.7	2666.3	2655.1	2620.0	2643.1
32.5°	2377.2	2363.5	2345.4	2384.0	2357.5	2348.0	2318.0	2351.4
35°	1965.4	1961.1	1944.8	1977.4	1962.8	1945.7	1926.8	1955.1
37.5°	1519.3	1522.7	1521.0	1529.6	1521.0	1509.9	1489.3	1479.0
40°	1159.9	1151.3	1144.4	1159.9	1141.8	1141.8	1129.8	1142.7
42.5°	909.4	905.9	914.5	917.9	907.6	905.9	904.2	903.3
45°	750.6	750.6	752.4	755.8	752.4	750.6	745.5	742.1
47.5°	618.5	622.0	618.5	629.7	623.7	622.0	611.7	616.0
50°	501.0	496.7	501.0	504.4	505.3	500.1	495.0	497.6
52.5°	388.6	381.8	380.0	385.2	381.8	381.8	378.3	377.5
55°	273.7	276.2	271.9	276.2	274.5	271.9	269.4	272.8
57.5°	185.3	186.2	184.4	187.0	182.7	183.6	182.7	181.9
60°	120.1	116.7	116.7	119.2	115.0	115.0	114.1	114.1
62.5°	68.6	67.8	67.8	66.9	66.1	66.1	66.1	64.3
65°	35.2	34.3	33.5	33.5	33.5	33.5	32.6	32.6
67.5°	17.2	16.3	16.3	17.2	16.3	16.3	16.3	16.3
70°	10.3	10.3	9.4	10.3	9.4	9.4	9.4	9.4
72.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
75°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	2.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
80°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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)