

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: P250911

Luminaire Tested: **LSR8B70D010 EC8B709730 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250911
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: LSR8B70D010 EC8B709730 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5863.0 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

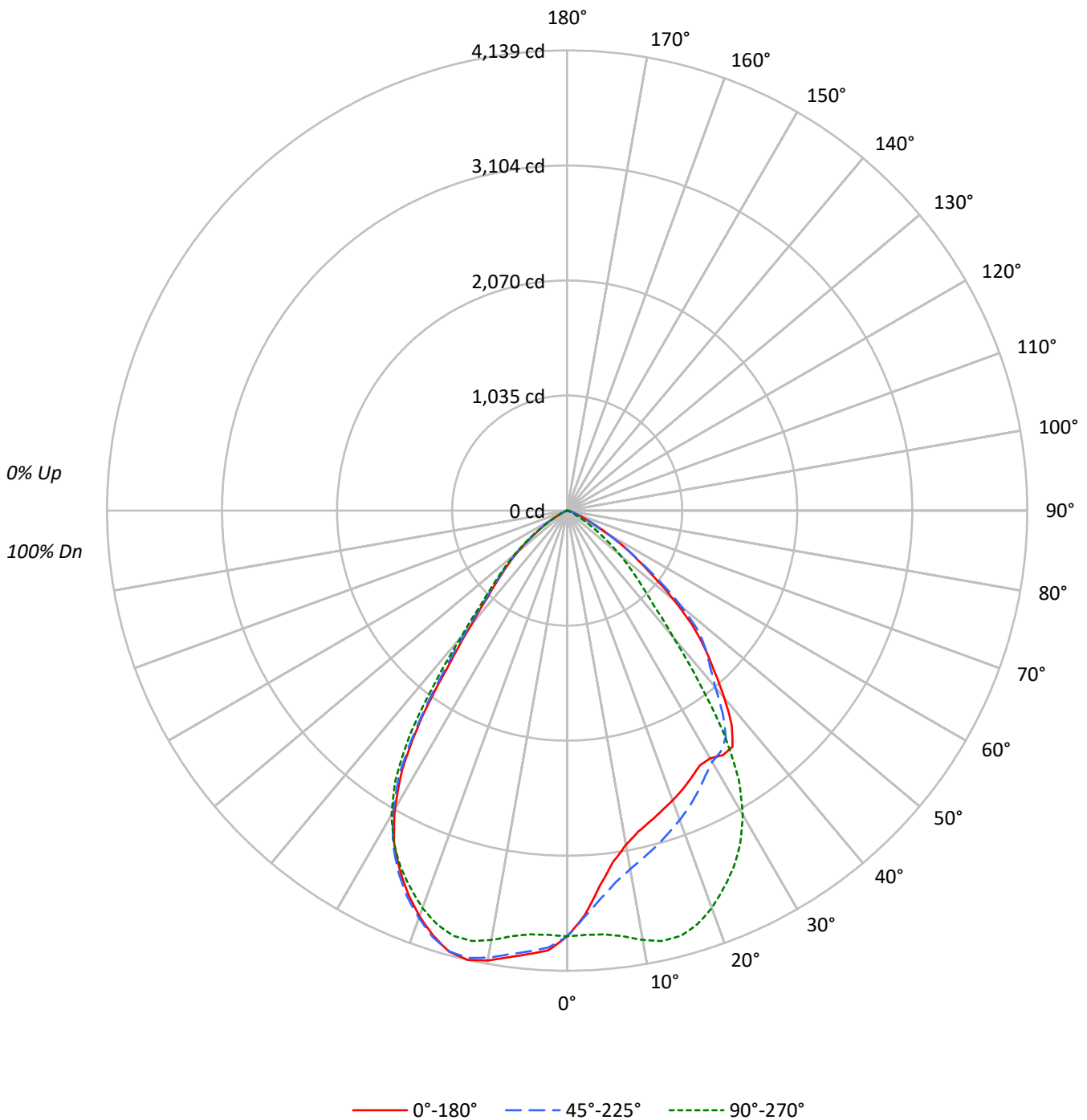
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.0	6.1
10°-20°	1031.1	17.6
20°-30°	1496.5	25.5
30°-40°	1473.9	25.1
40°-50°	923.9	15.8
50°-60°	445.8	7.6
60°-70°	107.9	1.8
70°-80°	21.8	0.4
80°-90°	5.0	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°	2884.6	49.2
0°-40°	4358.5	74.3
0°-60°	5728.3	97.7
0°-90°	5863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5863.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3830	3830	3830	3830	3830	
5°	3385	3500	3825	3980	4004	313
15°	2892	3120	3959	4104	4107	818
25°	2649	2787	3542	3591	3564	1226
35°	2593	2488	2473	2332	2294	1569
45°	1751	1763	935	896	870	1339
55°	778	803	340	336	320	716
65°	182	180	50	43	38	208
75°	44	38	11	5	4	50
85°	13	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°	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2
2.5°	3641.0	3617.8	3574.6	3626.9	3626.9	3597.7	3656.1	3620.9	3649.0	3693.3	3654.1
5°	3385.4	3366.3	3330.0	3385.4	3392.4	3365.2	3435.7	3409.5	3450.8	3505.1	3500.1
7.5°	3183.1	3158.9	3125.7	3183.1	3194.2	3176.0	3243.5	3231.4	3285.7	3356.2	3368.3
10°	3051.3	3026.1	2996.9	3049.2	3057.3	3045.2	3113.7	3106.6	3159.9	3241.5	3273.7
12.5°	2957.7	2936.5	2904.3	2959.7	2968.7	2951.6	3016.0	3013.0	3068.4	3153.9	3194.2
15°	2892.3	2867.1	2837.9	2885.2	2897.3	2878.2	2939.6	2933.5	2989.9	3074.4	3119.7
17.5°	2830.9	2807.7	2777.5	2821.8	2833.9	2813.8	2874.1	2864.1	2912.4	2992.9	3039.2
20°	2773.5	2748.3	2721.2	2766.5	2773.5	2750.4	2810.7	2797.7	2840.9	2915.4	2960.7
22.5°	2714.1	2688.0	2659.8	2704.1	2711.1	2688.0	2743.3	2728.2	2768.5	2835.9	2877.2
25°	2648.7	2624.6	2596.4	2637.7	2643.7	2618.5	2676.9	2657.8	2693.0	2752.4	2786.6
27.5°	2583.3	2560.2	2529.0	2571.2	2574.3	2550.1	2603.4	2577.3	2606.5	2660.8	2690.0
30°	2572.2	2546.1	2513.9	2548.1	2549.1	2517.9	2568.2	2537.0	2553.1	2593.4	2610.5
32.5°	2607.5	2581.3	2548.1	2576.3	2573.2	2539.0	2587.3	2549.1	2554.1	2575.3	2571.2
35°	2593.4	2562.2	2522.9	2553.1	2553.1	2511.9	2560.2	2514.9	2509.8	2512.9	2487.7
37.5°	2433.4	2409.2	2372.0	2401.2	2398.1	2366.9	2404.2	2366.9	2349.8	2342.8	2297.5
40°	2197.9	2168.7	2140.5	2171.7	2174.7	2141.5	2189.8	2147.6	2142.5	2122.4	2069.1
42.5°	1959.4	1949.3	1922.1	1948.3	1962.4	1934.2	1974.5	1954.3	1957.4	1952.3	1902.0
45°	1751.1	1733.9	1713.8	1744.0	1753.1	1739.0	1779.2	1767.2	1779.2	1804.4	1763.1
47.5°	1526.6	1509.5	1487.4	1519.6	1535.7	1509.5	1543.7	1539.7	1557.8	1601.1	1597.1
50°	1255.9	1243.9	1239.8	1243.9	1253.9	1241.8	1266.0	1267.0	1279.1	1338.4	1342.5
52.5°	994.3	991.3	977.2	990.3	990.3	971.1	995.3	984.2	996.3	1036.5	1062.7
55°	777.9	774.9	765.8	777.9	764.8	757.8	764.8	753.8	744.7	775.9	803.1
57.5°	605.8	595.8	584.7	589.7	588.7	573.6	581.7	568.6	561.5	572.6	596.8
60°	431.7	428.7	418.6	423.7	427.7	416.6	424.7	418.6	406.6	415.6	416.6
62.5°	286.8	288.8	282.8	283.8	280.8	278.8	283.8	286.8	283.8	279.8	280.8
65°	182.1	181.1	180.1	181.1	183.2	179.1	182.1	184.2	181.1	181.1	180.1
67.5°	120.8	117.7	114.7	116.7	118.7	115.7	118.7	117.7	118.7	117.7	114.7
70°	81.5	80.5	79.5	80.5	80.5	78.5	80.5	79.5	80.5	79.5	76.5
72.5°	59.4	59.4	58.4	59.4	59.4	57.4	58.4	56.4	57.4	56.4	54.3
75°	44.3	44.3	43.3	44.3	43.3	42.3	43.3	42.3	40.3	40.3	38.2
77.5°	32.2	32.2	32.2	32.2	32.2	31.2	31.2	30.2	29.2	28.2	28.2
80°	24.2	23.1	23.1	23.1	23.1	22.1	23.1	22.1	21.1	20.1	19.1
82.5°	17.1	18.1	17.1	17.1	17.1	16.1	17.1	16.1	16.1	15.1	13.1
85°	13.1	13.1	13.1	13.1	13.1	12.1	12.1	12.1	11.1	11.1	10.1
87.5°	7.0	7.0	7.0	8.1	7.0	7.0	7.0	6.0	6.0	5.0	5.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2
2.5°	3706.4	3711.4	3700.4	3717.5	3783.9	3730.6	3752.7	3759.7	3810.1	3819.1	3813.1
5°	3565.5	3587.6	3601.7	3640.0	3713.4	3675.2	3714.4	3739.6	3804.0	3825.1	3830.2
7.5°	3454.8	3501.1	3535.3	3597.7	3684.3	3655.1	3714.4	3755.7	3834.2	3861.4	3874.5
10°	3372.3	3442.7	3502.1	3587.6	3685.3	3666.1	3743.6	3802.0	3889.6	3921.8	3937.9
12.5°	3309.9	3395.4	3474.9	3583.6	3689.3	3680.2	3773.8	3840.2	3932.8	3965.0	3984.2
15°	3241.5	3340.1	3432.7	3554.4	3668.2	3666.1	3766.8	3837.2	3931.8	3959.0	3977.1
17.5°	3159.9	3265.6	3367.3	3499.1	3611.8	3613.8	3715.5	3784.9	3877.5	3899.6	3911.7
20°	3077.4	3182.1	3283.7	3419.6	3530.3	3533.3	3632.9	3697.3	3785.9	3804.0	3807.0
22.5°	2989.9	3087.5	3189.1	3324.0	3430.7	3432.7	3531.3	3591.7	3667.1	3676.2	3684.3
25°	2890.2	2985.8	3081.5	3215.3	3316.9	3323.0	3412.5	3465.9	3535.3	3542.4	3545.4
27.5°	2786.6	2865.1	2956.7	3071.4	3174.0	3170.0	3254.5	3314.9	3377.3	3373.3	3372.3
30°	2681.9	2747.3	2803.7	2914.4	2989.9	2992.9	3072.4	3101.6	3167.0	3158.9	3157.9
32.5°	2608.5	2625.6	2640.7	2697.0	2768.5	2743.3	2797.7	2833.9	2879.2	2876.2	2877.2
35°	2473.6	2442.4	2397.1	2405.2	2448.5	2409.2	2438.4	2437.4	2483.7	2472.6	2485.7
37.5°	2243.2	2154.6	2054.0	1996.6	2004.7	1955.3	1945.3	1969.4	1985.5	1954.3	1965.4
40°	1997.6	1866.8	1709.8	1579.0	1571.9	1510.5	1499.5	1475.3	1506.5	1480.3	1488.4
42.5°	1816.5	1643.4	1437.1	1278.1	1243.9	1192.5	1162.3	1158.3	1167.4	1149.3	1144.2
45°	1677.6	1493.4	1256.9	1074.8	1036.5	981.2	951.0	939.9	940.9	934.9	929.9
47.5°	1514.6	1329.4	1089.9	903.7	860.4	808.1	777.9	770.9	774.9	766.8	760.8
50°	1289.1	1123.1	904.7	734.6	696.4	658.2	634.0	627.0	626.0	619.9	615.9
52.5°	1046.6	908.7	719.5	577.6	543.4	506.2	489.1	480.0	481.0	475.0	469.0
55°	810.1	724.6	557.5	436.8	405.6	376.4	360.3	349.2	346.2	340.1	337.1
57.5°	602.8	545.4	417.6	315.0	296.9	268.7	252.6	239.5	237.5	234.5	233.5
60°	422.7	381.4	293.9	224.4	203.3	186.2	170.1	157.0	151.0	149.9	146.9
62.5°	273.7	248.6	193.2	149.9	133.8	121.8	105.7	96.6	92.6	88.6	89.6
65°	170.1	151.0	120.8	96.6	87.6	78.5	66.4	58.4	54.3	50.3	51.3
67.5°	105.7	94.6	76.5	62.4	56.4	49.3	40.3	34.2	31.2	28.2	26.2
70°	71.5	61.4	52.3	44.3	40.3	35.2	29.2	24.2	22.1	20.1	18.1
72.5°	50.3	45.3	38.2	33.2	30.2	26.2	22.1	19.1	17.1	15.1	13.1
75°	36.2	32.2	28.2	24.2	22.1	20.1	17.1	15.1	13.1	11.1	9.1
77.5°	26.2	23.1	20.1	18.1	17.1	14.1	12.1	11.1	10.1	8.1	6.0
80°	18.1	16.1	13.1	12.1	12.1	10.1	9.1	8.1	7.0	5.0	4.0
82.5°	12.1	11.1	10.1	9.1	8.1	7.0	7.0	5.0	4.0	3.0	2.0
85°	9.1	8.1	7.0	6.0	6.0	5.0	4.0	3.0	3.0	2.0	1.0
87.5°	5.0	5.0	4.0	3.0	3.0	2.0	2.0	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°	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2
2.5°	3864.4	3867.4	3884.5	3871.4	3904.6	3928.8	3916.7	3943.9	3934.8	3932.8	3964.0
5°	3890.6	3897.6	3920.8	3908.7	3944.9	3971.1	3959.0	3989.2	3980.1	3978.1	4010.3
7.5°	3940.9	3947.9	3968.0	3958.0	3996.2	4019.4	4004.3	4037.5	4025.4	4024.4	4055.6
10°	4004.3	4014.3	4031.4	4021.4	4056.6	4076.7	4061.6	4093.8	4082.8	4077.7	4112.0
12.5°	4051.6	4058.6	4075.7	4067.7	4101.9	4117.0	4103.9	4135.1	4121.0	4117.0	4147.2
15°	4040.5	4047.6	4061.6	4054.6	4086.8	4100.9	4083.8	4118.0	4103.9	4095.9	4123.0
17.5°	3970.1	3974.1	3984.2	3977.1	4011.3	4020.4	4001.3	4035.5	4022.4	4008.3	4034.5
20°	3866.4	3864.4	3870.4	3867.4	3895.6	3900.6	3888.5	3913.7	3898.6	3890.6	3905.7
22.5°	3737.6	3735.6	3739.6	3731.6	3759.7	3762.8	3744.6	3774.8	3759.7	3744.6	3769.8
25°	3594.7	3583.6	3581.6	3584.6	3603.7	3606.8	3587.6	3609.8	3590.7	3578.6	3602.7
27.5°	3418.6	3404.5	3401.5	3404.5	3423.6	3409.5	3393.4	3409.5	3390.4	3379.3	3394.4
30°	3201.2	3181.1	3172.0	3166.0	3186.1	3181.1	3143.8	3162.0	3131.8	3115.7	3126.7
32.5°	2908.4	2897.3	2873.1	2859.0	2878.2	2839.9	2816.8	2816.8	2804.7	2777.5	2783.6
35°	2501.8	2484.7	2462.5	2450.5	2453.5	2402.2	2363.9	2372.0	2331.7	2324.7	2327.7
37.5°	1987.5	1959.4	1951.3	1926.2	1932.2	1886.9	1834.6	1835.6	1814.5	1792.3	1785.3
40°	1493.4	1488.4	1480.3	1459.2	1467.3	1418.0	1397.8	1398.8	1384.7	1368.6	1376.7
42.5°	1154.3	1138.2	1133.2	1126.1	1128.1	1120.1	1093.9	1096.9	1084.8	1080.8	1076.8
45°	937.9	920.8	908.7	914.8	914.8	905.7	895.7	901.7	895.7	887.6	891.6
47.5°	772.9	756.8	750.7	749.7	756.8	750.7	740.7	742.7	741.7	738.7	736.7
50°	616.9	612.9	607.8	604.8	607.8	605.8	596.8	601.8	604.8	594.8	597.8
52.5°	470.0	470.0	469.0	461.9	468.0	461.9	460.9	462.9	459.9	455.9	454.9
55°	344.2	341.2	336.1	335.1	337.1	335.1	333.1	334.1	336.1	326.1	326.1
57.5°	235.5	233.5	230.5	230.5	234.5	229.4	226.4	230.5	226.4	222.4	222.4
60°	151.0	149.9	146.9	146.9	146.9	145.9	142.9	143.9	145.9	139.9	140.9
62.5°	90.6	87.6	86.5	85.5	86.5	85.5	85.5	84.5	83.5	83.5	80.5
65°	49.3	47.3	45.3	46.3	46.3	45.3	45.3	45.3	43.3	42.3	41.3
67.5°	25.2	23.1	23.1	22.1	22.1	22.1	22.1	21.1	21.1	21.1	20.1
70°	16.1	15.1	14.1	14.1	14.1	13.1	13.1	13.1	13.1	13.1	12.1
72.5°	11.1	10.1	9.1	9.1	9.1	8.1	8.1	8.1	8.1	7.0	7.0
75°	8.1	7.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	5.0	5.0
77.5°	5.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0
80°	3.0	3.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
82.5°	2.0	2.0	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: P250911

CATALOG NUMBER: LSR8B70D010 EC8B709730 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2	3830.2
2.5°	3953.0	3944.9	3949.9	3987.2	3971.1	3966.0	3923.8	3961.0
5°	4000.3	3994.2	3994.2	4036.5	4017.4	4013.3	3972.1	4004.3
7.5°	4044.5	4038.5	4039.5	4082.8	4067.7	4061.6	4020.4	4052.6
10°	4101.9	4097.9	4098.9	4140.1	4124.0	4118.0	4075.7	4108.9
12.5°	4136.1	4130.1	4130.1	4174.4	4156.2	4147.2	4106.9	4139.1
15°	4109.9	4100.9	4100.9	4145.2	4125.0	4112.0	4076.7	4106.9
17.5°	4020.4	4011.3	4011.3	4049.6	4034.5	4015.3	3979.1	4007.3
20°	3895.6	3884.5	3881.5	3925.8	3904.6	3887.5	3855.3	3882.5
22.5°	3754.7	3749.7	3740.6	3784.9	3765.8	3747.7	3713.4	3734.6
25°	3585.6	3577.6	3568.5	3611.8	3592.7	3574.6	3547.4	3564.5
27.5°	3375.3	3376.3	3371.3	3405.5	3386.4	3376.3	3343.1	3371.3
30°	3120.7	3109.6	3105.6	3145.9	3127.7	3114.7	3073.4	3100.6
32.5°	2788.6	2772.5	2751.4	2796.7	2765.5	2754.4	2719.2	2758.4
35°	2305.6	2300.5	2281.4	2319.6	2302.5	2282.4	2260.3	2293.5
37.5°	1782.3	1786.3	1784.3	1794.3	1784.3	1771.2	1747.0	1735.0
40°	1360.6	1350.5	1342.5	1360.6	1339.5	1339.5	1325.4	1340.5
42.5°	1066.7	1062.7	1072.8	1076.8	1064.7	1062.7	1060.7	1059.7
45°	880.6	880.6	882.6	886.6	882.6	880.6	874.5	870.5
47.5°	725.6	729.6	725.6	738.7	731.6	729.6	717.5	722.6
50°	587.7	582.7	587.7	591.7	592.7	586.7	580.7	583.7
52.5°	455.9	447.8	445.8	451.9	447.8	447.8	443.8	442.8
55°	321.0	324.0	319.0	324.0	322.0	319.0	316.0	320.0
57.5°	217.4	218.4	216.4	219.4	214.4	215.4	214.4	213.3
60°	140.9	136.9	136.9	139.9	134.9	134.9	133.8	133.8
62.5°	80.5	79.5	79.5	78.5	77.5	77.5	77.5	75.5
65°	41.3	40.3	39.2	39.2	39.2	39.2	38.2	38.2
67.5°	20.1	19.1	19.1	20.1	19.1	19.1	19.1	19.1
70°	12.1	12.1	11.1	12.1	11.1	11.1	11.1	11.1
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)