

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: P248527

Luminaire Tested: **LSR8B90D010 EC8B909727 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248527
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: LSR8B90D010 EC8B909727 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6708.0 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

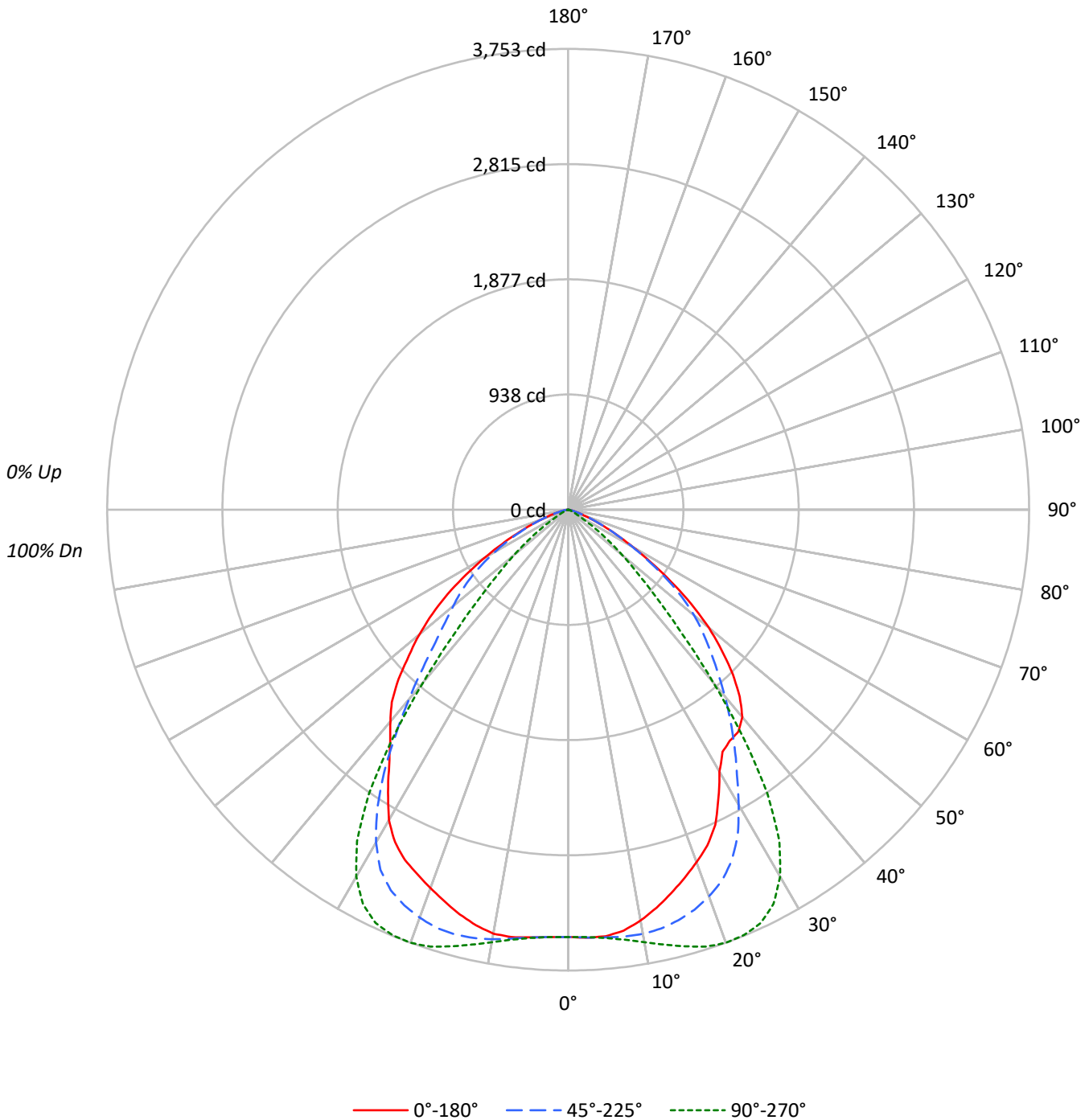
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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°	334.7	5.0
10°-20°	991.4	14.8
20°-30°	1512.4	22.5
30°-40°	1578.3	23.5
40°-50°	1185.5	17.7
50°-60°	729.4	10.9
60°-70°	296.8	4.4
70°-80°	69.9	1.0
80°-90°	9.6	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°	2838.5	42.3
0°-40°	4416.7	65.8
0°-60°	6331.6	94.4
0°-90°	6708.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6708.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3480	3480	3480	3480	3480	
5°	3487	3496	3500	3496	3496	330
15°	3234	3461	3681	3580	3412	911
25°	2833	3151	3713	3419	3147	1288
35°	2296	2361	2828	2614	2540	1450
45°	1895	1640	1023	1528	1954	1446
55°	1023	972	268	972	1199	920
65°	320	323	41	434	460	333
75°	55	55	7	98	102	67
85°	6	6	2	13	17	8
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°	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9
2.5°	3489.1	3483.6	3489.1	3489.1	3491.0	3487.3	3489.1	3491.0	3487.3	3487.3	3487.3
5°	3487.3	3483.6	3487.3	3485.4	3489.1	3489.1	3492.8	3492.8	3496.5	3496.5	3502.1
7.5°	3457.7	3450.4	3457.7	3463.3	3466.9	3474.4	3483.6	3491.0	3498.4	3505.8	3515.0
10°	3396.8	3396.8	3402.3	3413.4	3424.5	3437.4	3454.0	3472.5	3491.0	3507.6	3524.2
12.5°	3321.1	3315.5	3326.6	3341.4	3358.0	3378.3	3404.2	3431.9	3461.4	3494.7	3520.5
15°	3234.2	3228.7	3241.6	3256.4	3276.7	3306.3	3337.7	3374.6	3417.1	3461.4	3503.9
17.5°	3145.6	3143.7	3156.6	3177.0	3193.6	3225.0	3265.6	3309.9	3358.0	3417.1	3472.5
20°	3055.1	3053.2	3066.2	3082.8	3104.9	3134.5	3175.1	3226.8	3284.1	3350.6	3415.2
22.5°	2960.9	2962.7	2973.8	2992.3	3010.7	3042.1	3084.6	3136.3	3199.1	3271.2	3343.2
25°	2833.4	2824.2	2839.0	2857.4	2888.8	2914.7	2955.3	3010.7	3075.4	3151.1	3236.1
27.5°	2648.7	2646.8	2659.8	2676.4	2704.1	2735.5	2779.8	2837.1	2905.4	2988.6	3071.7
30°	2464.0	2467.7	2473.2	2489.9	2508.3	2539.7	2584.1	2632.1	2696.7	2776.1	2864.8
32.5°	2338.4	2338.4	2345.8	2356.9	2369.8	2386.4	2417.8	2452.9	2502.8	2558.2	2622.8
35°	2295.9	2288.5	2295.9	2297.8	2299.6	2303.3	2308.8	2319.9	2336.5	2360.6	2384.6
37.5°	2277.5	2271.9	2271.9	2264.5	2255.3	2244.2	2229.4	2212.8	2194.3	2170.3	2151.9
40°	2205.4	2201.7	2198.0	2190.6	2170.3	2148.2	2124.1	2085.3	2042.9	1983.7	1924.7
42.5°	2066.9	2063.2	2061.3	2046.6	2028.1	2002.2	1974.5	1933.9	1880.3	1804.6	1719.6
45°	1895.1	1887.7	1882.2	1869.3	1856.3	1834.1	1808.3	1771.3	1717.8	1640.2	1538.6
47.5°	1695.6	1691.9	1690.1	1684.5	1671.6	1658.7	1642.1	1612.5	1564.5	1490.6	1385.3
50°	1494.3	1486.9	1490.6	1488.8	1483.2	1474.0	1462.9	1442.6	1405.6	1339.1	1243.1
52.5°	1263.4	1263.4	1261.6	1267.1	1268.9	1267.1	1268.9	1246.8	1215.4	1165.5	1084.2
55°	1023.3	1023.3	1028.8	1036.2	1043.6	1045.4	1043.6	1034.4	1012.2	971.6	899.5
57.5°	797.9	794.3	805.3	816.4	823.8	831.2	825.6	818.3	805.3	772.1	716.7
60°	607.7	607.7	615.1	622.5	629.8	637.2	635.4	633.5	622.5	600.3	556.0
62.5°	447.0	448.8	448.8	454.4	461.8	469.2	474.7	469.2	463.6	448.8	419.3
65°	319.5	317.7	319.5	325.1	330.6	338.0	341.7	339.9	334.3	323.2	301.1
67.5°	214.3	212.4	219.8	221.6	225.3	232.8	230.9	232.8	230.9	221.6	203.2
70°	140.4	136.7	140.4	138.5	144.1	145.9	149.6	151.4	149.6	144.1	138.5
72.5°	86.8	85.0	86.8	88.7	90.5	92.3	96.0	96.0	94.2	90.5	83.1
75°	55.4	49.9	51.7	48.0	51.7	51.7	55.4	57.3	55.4	55.4	51.7
77.5°	33.3	33.3	33.3	33.3	33.3	33.3	33.3	35.1	36.9	33.3	31.4
80°	16.6	16.6	18.5	18.5	18.5	20.3	18.5	18.5	18.5	20.3	14.8
82.5°	12.9	11.1	11.1	11.1	12.9	11.1	11.1	11.1	11.1	11.1	11.1
85°	5.6	7.4	5.6	3.7	5.6	5.6	7.4	5.6	5.6	5.6	7.4
87.5°	1.9	1.9	0.0	0.0	0.0	1.9	0.0	1.9	1.9	3.7	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°	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9
2.5°	3489.1	3485.4	3485.4	3483.6	3487.3	3483.6	3485.4	3483.6	3483.6	3487.3	3483.6
5°	3502.1	3503.9	3500.2	3498.4	3503.9	3503.9	3503.9	3500.2	3500.2	3502.1	3500.2
7.5°	3520.5	3524.2	3526.1	3527.9	3531.6	3533.5	3533.5	3531.6	3529.8	3535.3	3527.9
10°	3540.8	3546.4	3557.5	3563.0	3572.3	3572.3	3576.0	3576.0	3572.3	3576.0	3574.1
12.5°	3533.5	3566.7	3585.2	3598.1	3611.0	3622.1	3625.8	3627.7	3625.8	3633.2	3625.8
15°	3546.4	3574.1	3603.7	3625.8	3649.8	3662.7	3666.4	3681.2	3684.9	3686.8	3675.7
17.5°	3526.1	3576.0	3607.3	3640.6	3675.7	3699.7	3721.8	3731.1	3733.0	3736.6	3721.8
20°	3479.9	3535.3	3583.3	3631.4	3672.0	3708.9	3727.4	3753.3	3745.9	3760.7	3740.3
22.5°	3417.1	3479.9	3540.8	3603.7	3646.1	3690.5	3729.3	3747.7	3757.0	3757.0	3734.8
25°	3317.4	3391.2	3457.7	3522.4	3587.0	3640.6	3684.9	3712.6	3718.2	3716.3	3690.5
27.5°	3162.2	3241.6	3319.2	3393.1	3472.5	3535.3	3587.0	3620.2	3629.5	3629.5	3601.8
30°	2947.9	3032.9	3108.6	3197.3	3278.6	3348.8	3420.8	3450.4	3466.9	3466.9	3435.6
32.5°	2693.0	2765.1	2835.3	2922.1	3010.7	3090.2	3158.5	3199.1	3219.5	3217.6	3189.9
35°	2416.0	2451.1	2504.7	2569.3	2648.7	2722.6	2789.1	2827.9	2863.0	2861.1	2835.3
37.5°	2138.9	2129.7	2135.2	2159.2	2209.1	2260.8	2312.5	2349.5	2379.0	2392.0	2386.4
40°	1867.4	1819.4	1773.2	1756.6	1760.3	1778.7	1806.4	1834.1	1867.4	1884.0	1891.4
42.5°	1623.6	1542.3	1461.0	1400.1	1365.0	1353.9	1366.8	1376.1	1396.4	1420.4	1444.4
45°	1427.8	1318.8	1211.7	1117.5	1058.4	1023.3	1015.9	1023.3	1034.4	1058.4	1089.8
47.5°	1267.1	1139.6	1019.6	914.3	827.5	781.3	768.4	764.7	775.8	797.9	840.4
50°	1124.9	997.4	864.4	742.5	652.0	600.3	581.8	574.4	587.4	604.0	642.8
52.5°	969.7	844.1	707.4	589.2	495.0	441.5	421.1	410.1	417.4	439.6	478.4
55°	801.6	685.2	561.5	439.6	349.1	299.2	275.2	267.8	275.2	299.2	338.0
57.5°	633.5	535.7	432.2	317.7	236.4	186.6	162.5	155.2	175.5	184.7	225.3
60°	495.0	415.6	326.9	232.8	162.5	123.7	99.7	94.2	103.5	120.0	153.3
62.5°	371.3	321.4	251.2	166.2	120.0	79.4	66.5	61.0	66.5	79.4	105.3
65°	269.7	230.9	175.5	121.9	81.3	59.1	44.3	40.6	46.2	55.4	77.6
67.5°	184.7	155.2	121.9	85.0	55.4	36.9	31.4	31.4	33.3	40.6	57.3
70°	120.0	101.6	77.6	55.4	36.9	27.7	24.0	20.3	24.0	29.6	38.8
72.5°	75.7	64.6	49.9	38.8	27.7	20.3	16.6	14.8	18.5	22.1	29.6
75°	46.2	35.1	25.9	20.3	14.8	14.8	14.8	7.4	9.2	14.8	18.5
77.5°	27.7	24.0	20.3	16.6	12.9	7.4	7.4	7.4	9.2	11.1	16.6
80°	14.8	12.9	9.2	9.2	7.4	5.6	7.4	5.6	3.7	9.2	11.1
82.5°	9.2	7.4	7.4	7.4	9.2	3.7	5.6	3.7	5.6	7.4	5.6
85°	5.6	5.6	5.6	3.7	9.2	3.7	3.7	1.9	1.9	3.7	3.7
87.5°	0.0	1.9	1.9	0.0	1.9	0.0	1.9	1.9	1.9	1.9	1.9
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9	3479.9
2.5°	3485.4	3483.6	3485.4	3483.6	3483.6	3483.6	3485.4	3485.4	3483.6	3483.6	3487.3
5°	3500.2	3500.2	3500.2	3498.4	3496.5	3496.5	3500.2	3500.2	3494.7	3500.2	3500.2
7.5°	3531.6	3526.1	3531.6	3524.2	3520.5	3522.4	3524.2	3520.5	3516.8	3518.7	3518.7
10°	3572.3	3566.7	3566.7	3561.2	3555.6	3551.9	3548.3	3539.0	3529.8	3527.9	3520.5
12.5°	3620.2	3611.0	3605.5	3594.4	3585.2	3572.3	3561.2	3546.4	3527.9	3515.0	3502.1
15°	3668.3	3653.5	3640.6	3622.1	3601.8	3579.6	3555.6	3531.6	3502.1	3476.2	3454.0
17.5°	3707.1	3686.8	3662.7	3633.2	3603.7	3570.4	3535.3	3500.2	3457.7	3424.5	3398.6
20°	3720.0	3690.5	3659.1	3620.2	3581.5	3535.3	3491.0	3444.8	3396.8	3361.7	3332.1
22.5°	3703.4	3668.3	3629.5	3588.9	3537.1	3487.3	3435.6	3382.0	3339.5	3291.5	3263.8
25°	3657.2	3614.7	3572.3	3524.2	3474.4	3418.9	3363.5	3308.1	3256.4	3230.5	3195.5
27.5°	3563.0	3516.8	3470.7	3420.8	3363.5	3308.1	3250.9	3197.3	3153.0	3117.9	3097.6
30°	3396.8	3343.2	3289.6	3236.1	3186.2	3128.9	3075.4	3031.0	2986.7	2959.0	2938.7
32.5°	3141.9	3093.9	3040.3	2988.6	2942.4	2894.4	2850.0	2811.3	2779.8	2761.4	2746.6
35°	2798.3	2750.3	2709.7	2672.7	2633.9	2613.6	2585.9	2563.7	2550.8	2543.4	2541.6
37.5°	2366.1	2338.4	2325.5	2318.1	2310.7	2305.2	2308.8	2318.1	2325.5	2338.4	2353.2
40°	1904.3	1928.3	1935.7	1961.6	1985.6	2017.0	2052.1	2092.8	2126.0	2168.5	2198.0
42.5°	1483.2	1527.5	1579.2	1634.7	1693.8	1751.0	1821.2	1885.8	1945.0	1998.5	2044.7
45°	1139.6	1208.0	1285.6	1365.0	1444.4	1527.5	1612.5	1691.9	1762.1	1819.4	1867.4
47.5°	888.4	964.2	1063.9	1161.8	1257.9	1355.8	1449.9	1533.1	1592.2	1647.6	1690.1
50°	703.7	790.5	899.5	1012.2	1117.5	1220.9	1320.6	1398.2	1457.4	1501.7	1533.1
52.5°	544.9	648.3	759.1	877.4	990.0	1102.7	1195.0	1267.1	1315.1	1353.9	1377.9
55°	406.3	507.9	626.2	748.1	862.6	971.6	1058.4	1121.2	1163.7	1185.8	1198.8
57.5°	293.7	386.1	504.2	626.2	729.6	833.0	903.2	960.5	984.5	997.4	1003.0
60°	214.3	299.2	404.5	509.8	607.7	690.8	751.8	790.5	809.0	816.4	814.5
62.5°	157.0	230.9	321.4	410.1	489.5	557.8	605.8	631.7	641.0	644.6	639.1
65°	120.0	177.3	254.9	323.2	384.2	434.1	469.2	485.8	491.3	489.5	485.8
67.5°	88.7	133.0	190.3	242.0	286.3	325.1	343.6	358.3	362.0	356.5	350.9
70°	62.8	97.9	138.5	173.6	206.9	229.0	249.3	251.2	251.2	249.3	245.7
72.5°	44.3	68.3	94.2	118.2	138.5	155.2	162.5	168.1	166.2	164.4	160.7
75°	29.6	42.5	68.3	73.9	92.3	97.9	105.3	105.3	107.1	101.6	101.6
77.5°	18.5	29.6	40.6	48.0	55.4	62.8	66.5	66.5	68.3	66.5	66.5
80°	11.1	18.5	22.1	33.3	33.3	38.8	40.6	42.5	38.8	44.3	38.8
82.5°	7.4	11.1	16.6	16.6	20.3	24.0	24.0	25.9	25.9	24.0	24.0
85°	5.6	7.4	9.2	11.1	11.1	12.9	11.1	11.1	12.9	14.8	12.9
87.5°	1.9	3.7	1.9	3.7	3.7	7.4	5.6	5.6	5.6	7.4	7.4
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: P248527

CATALOG NUMBER: LSR8B90D010 EC8B909727 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3479.9	3479.9	3479.9	3479.9
2.5°	3483.6	3485.4	3483.6	3483.6
5°	3500.2	3498.4	3500.2	3496.5
7.5°	3513.1	3513.1	3511.3	3511.3
10°	3513.1	3505.8	3505.8	3505.8
12.5°	3485.4	3476.2	3470.7	3466.9
15°	3437.4	3420.8	3413.4	3411.5
17.5°	3374.6	3359.8	3350.6	3345.1
20°	3302.6	3287.8	3276.7	3278.6
22.5°	3239.8	3223.2	3215.8	3212.0
25°	3177.0	3156.6	3151.1	3147.4
27.5°	3075.4	3064.3	3058.7	3053.2
30°	2920.2	2914.7	2905.4	2918.4
32.5°	2741.1	2731.8	2724.4	2730.0
35°	2543.4	2537.9	2543.4	2539.7
37.5°	2362.4	2367.9	2375.4	2379.0
40°	2220.2	2240.5	2247.9	2251.6
42.5°	2078.0	2102.0	2116.7	2126.0
45°	1902.5	1926.5	1943.1	1954.2
47.5°	1721.5	1741.8	1758.4	1756.6
50°	1557.1	1568.2	1575.5	1583.0
52.5°	1390.8	1390.8	1392.7	1392.7
55°	1202.5	1198.8	1196.9	1198.8
57.5°	995.6	991.9	990.0	984.5
60°	807.2	796.1	788.7	788.7
62.5°	631.7	618.8	613.2	611.4
65°	474.7	472.8	461.8	459.9
67.5°	343.6	336.2	328.8	330.6
70°	242.0	230.9	230.9	227.2
72.5°	157.0	151.4	149.6	149.6
75°	97.9	97.9	94.2	101.6
77.5°	64.6	64.6	62.8	64.6
80°	38.8	38.8	38.8	36.9
82.5°	24.0	25.9	24.0	24.0
85°	12.9	14.8	11.1	16.6
87.5°	7.4	9.2	7.4	9.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)