

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: P249500

Luminaire Tested: **LSR8B100D010 EC8B1009727 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249500
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B1009727 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6796.0 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

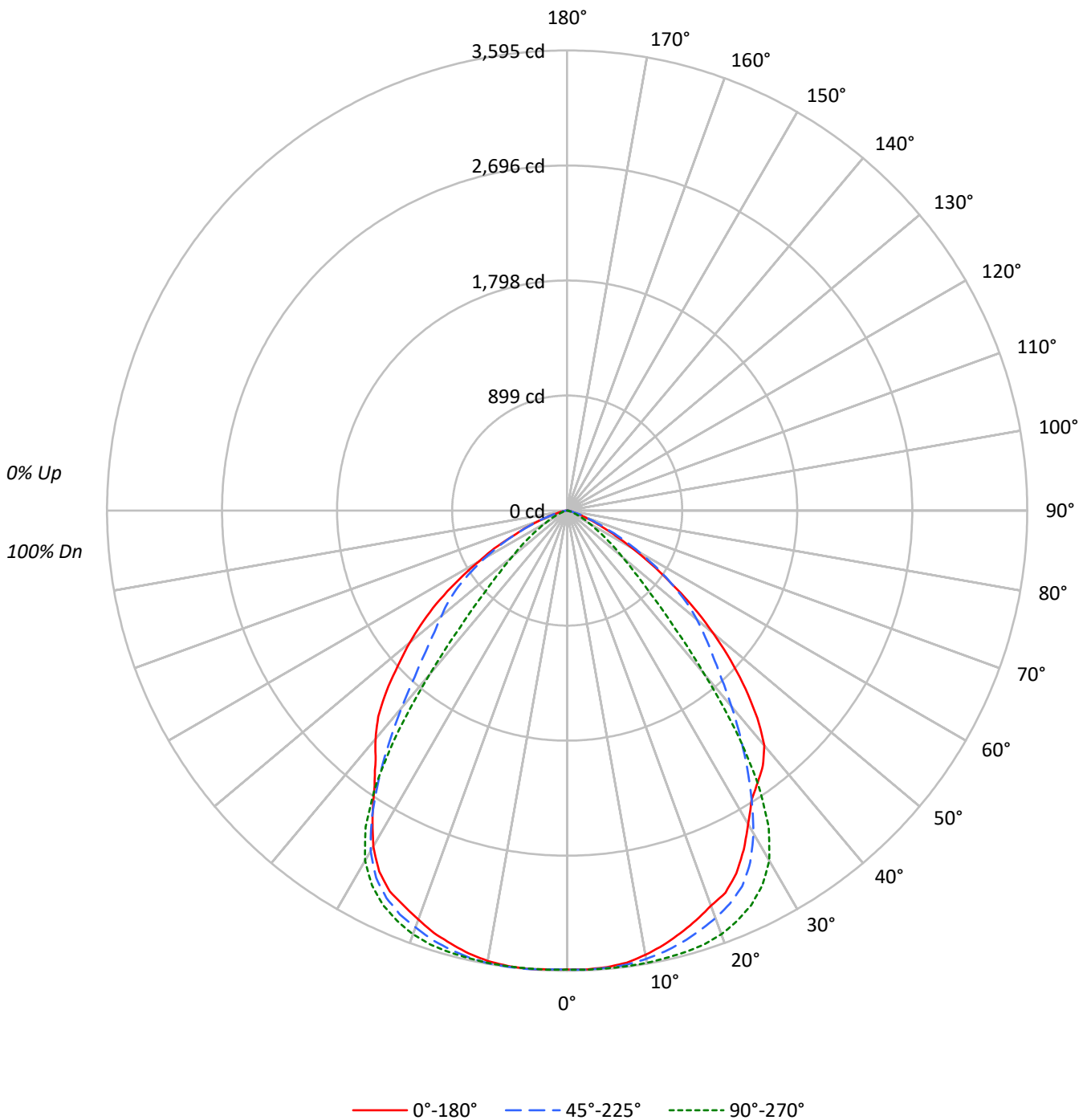
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	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°	342.2	5.0
10°-20°	993.8	14.6
20°-30°	1508.4	22.2
30°-40°	1584.3	23.3
40°-50°	1187.8	17.5
50°-60°	762.1	11.2
60°-70°	326.0	4.8
70°-80°	77.0	1.1
80°-90°	14.3	0.2
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°	2844.4	41.9
0°-40°	4428.7	65.2
0°-60°	6378.6	93.9
0°-90°	6796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6796.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3586	3586	3586	3586	3586	
5°	3580	3586	3590	3595	3593	340
15°	3418	3490	3570	3547	3503	964
25°	3128	3237	3401	3339	3282	1429
35°	2594	2450	2596	2566	2623	1628
45°	1971	1611	926	1565	1998	1509
55°	997	997	344	1039	1214	904
65°	300	354	110	456	464	321
75°	46	54	15	92	90	67
85°	15	10	8	15	21	16
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°	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7
2.5°	3587.6	3591.5	3589.6	3589.6	3587.6	3589.6	3589.6	3593.4	3593.4	3589.6	3587.6
5°	3579.9	3583.8	3583.8	3579.9	3579.9	3589.6	3583.8	3587.6	3587.6	3585.7	3585.7
7.5°	3562.6	3562.6	3570.3	3564.6	3564.6	3570.3	3568.4	3572.2	3576.1	3578.0	3578.0
10°	3524.1	3528.0	3529.9	3529.9	3531.8	3537.6	3541.4	3549.2	3553.0	3556.8	3558.8
12.5°	3476.0	3481.8	3483.7	3481.8	3487.6	3495.2	3504.9	3514.5	3520.3	3528.0	3533.8
15°	3418.2	3418.2	3422.1	3427.9	3431.8	3443.3	3452.9	3464.4	3479.8	3489.5	3499.1
17.5°	3354.8	3358.6	3364.4	3364.4	3372.1	3391.3	3397.1	3414.4	3431.8	3441.4	3460.6
20°	3285.5	3289.3	3295.1	3298.9	3308.6	3324.0	3335.5	3350.9	3370.2	3387.5	3406.7
22.5°	3231.6	3223.9	3227.7	3231.6	3241.2	3254.7	3268.1	3287.4	3306.6	3324.0	3343.2
25°	3127.6	3129.5	3135.3	3139.2	3150.7	3162.3	3177.7	3200.8	3218.1	3237.3	3258.5
27.5°	2987.1	2989.1	2998.7	2998.7	3008.3	3027.5	3037.2	3056.4	3079.5	3098.7	3123.8
30°	2827.4	2831.2	2831.2	2838.9	2844.7	2854.3	2863.9	2883.2	2894.7	2912.1	2946.7
32.5°	2681.1	2684.9	2683.0	2681.1	2675.3	2673.4	2671.5	2675.3	2679.2	2684.9	2698.4
35°	2594.5	2584.9	2577.2	2563.7	2548.3	2529.1	2511.7	2488.6	2467.5	2450.1	2430.9
37.5°	2511.7	2509.8	2498.3	2479.0	2448.2	2413.6	2373.2	2323.1	2273.0	2219.2	2167.2
40°	2396.2	2390.5	2380.8	2353.9	2319.2	2276.9	2223.0	2161.4	2080.6	1997.8	1913.2
42.5°	2199.9	2201.8	2190.3	2169.1	2136.4	2096.0	2040.2	1972.8	1886.2	1788.0	1678.3
45°	1970.9	1970.9	1967.0	1949.7	1926.6	1893.9	1851.6	1795.7	1711.1	1611.0	1493.5
47.5°	1732.2	1734.1	1728.4	1724.5	1714.9	1693.7	1662.9	1620.6	1560.9	1464.7	1347.3
50°	1489.7	1489.7	1499.3	1497.4	1497.4	1489.7	1476.3	1451.2	1399.3	1322.3	1212.6
52.5°	1247.2	1251.1	1256.8	1264.5	1274.1	1289.5	1274.1	1262.6	1229.9	1170.2	1075.9
55°	997.0	1000.8	1010.5	1023.9	1035.5	1050.9	1054.7	1054.7	1037.4	997.0	925.8
57.5°	783.4	777.6	785.3	796.8	812.2	827.6	839.2	852.6	850.7	823.8	766.0
60°	589.0	590.9	596.6	608.2	619.8	633.2	648.6	660.2	666.0	652.5	615.9
62.5°	429.2	429.2	436.9	448.4	454.2	473.5	483.1	488.9	494.6	492.7	469.6
65°	300.3	304.1	307.9	313.7	319.5	331.0	336.8	348.4	352.2	354.1	336.8
67.5°	211.7	205.9	209.8	213.6	219.4	227.1	238.7	238.7	244.4	244.4	232.9
70°	134.7	134.7	136.7	142.4	146.3	148.2	152.1	155.9	161.7	159.7	159.7
72.5°	90.5	88.5	90.5	92.4	94.3	100.1	100.1	102.0	105.9	107.8	100.1
75°	46.2	48.1	51.9	50.1	55.8	51.9	53.9	59.7	57.7	53.9	53.9
77.5°	38.5	38.5	38.5	36.6	40.4	40.4	38.5	42.3	40.4	40.4	38.5
80°	26.9	28.9	26.9	25.0	26.9	25.0	25.0	25.0	25.0	25.0	23.1
82.5°	21.2	17.3	19.3	17.3	19.3	19.3	17.3	15.4	15.4	17.3	15.4
85°	15.4	11.5	13.5	13.5	11.5	11.5	11.5	11.5	11.5	9.6	9.6
87.5°	9.6	5.8	5.8	5.8	7.7	7.7	7.7	5.8	7.7	7.7	3.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7
2.5°	3591.5	3589.6	3593.4	3591.5	3591.5	3589.6	3591.5	3589.6	3593.4	3585.7	3587.6
5°	3591.5	3587.6	3589.6	3591.5	3593.4	3589.6	3589.6	3589.6	3593.4	3589.6	3591.5
7.5°	3583.8	3581.8	3587.6	3591.5	3589.6	3587.6	3591.5	3589.6	3593.4	3591.5	3595.3
10°	3568.4	3570.3	3574.2	3579.9	3581.8	3583.8	3587.6	3587.6	3593.4	3585.7	3589.6
12.5°	3545.3	3553.0	3562.6	3566.4	3574.2	3574.2	3578.0	3579.9	3583.8	3581.8	3587.6
15°	3516.4	3526.0	3537.6	3547.2	3556.8	3562.6	3568.4	3570.3	3576.1	3570.3	3572.2
17.5°	3481.8	3493.3	3510.6	3522.2	3537.6	3543.4	3551.0	3554.9	3560.7	3556.8	3558.8
20°	3433.6	3447.2	3466.4	3483.7	3493.3	3506.8	3516.4	3522.2	3526.0	3522.2	3524.1
22.5°	3366.3	3385.6	3410.6	3424.0	3443.3	3454.8	3456.8	3470.2	3479.8	3470.2	3474.1
25°	3287.4	3306.6	3325.9	3354.8	3372.1	3385.6	3399.0	3401.0	3410.6	3408.6	3406.7
27.5°	3156.5	3181.5	3214.2	3237.3	3260.4	3281.6	3297.0	3300.8	3310.5	3306.6	3308.6
30°	2977.5	3004.5	3035.3	3071.8	3104.5	3125.7	3144.9	3158.4	3168.0	3162.3	3160.3
32.5°	2723.5	2750.4	2783.1	2819.7	2858.2	2888.9	2912.1	2929.4	2940.9	2937.1	2927.5
35°	2432.8	2440.5	2461.7	2490.6	2523.3	2556.0	2577.2	2596.4	2609.9	2613.7	2613.7
37.5°	2134.5	2109.5	2094.1	2094.1	2113.3	2126.8	2146.0	2157.6	2178.8	2186.4	2192.2
40°	1845.8	1788.0	1734.1	1693.7	1666.8	1664.9	1664.9	1670.6	1689.9	1714.9	1738.0
42.5°	1587.9	1495.5	1412.7	1337.7	1283.8	1253.0	1239.5	1241.4	1256.8	1279.9	1318.4
45°	1381.9	1266.5	1162.5	1072.1	998.9	950.8	927.7	925.8	937.3	964.3	1006.6
47.5°	1222.2	1099.0	981.6	877.6	798.8	746.8	719.8	712.2	719.8	744.8	794.9
50°	1089.4	962.4	841.1	733.3	648.6	594.8	569.7	560.1	569.7	590.9	640.9
52.5°	966.2	835.3	721.8	617.8	527.4	481.2	454.2	448.4	454.2	479.2	519.7
55°	823.8	712.2	600.5	496.6	417.7	371.5	350.3	344.5	350.3	373.4	415.7
57.5°	683.3	587.0	488.9	394.6	327.2	286.8	267.5	259.8	273.3	288.7	338.7
60°	552.4	475.4	392.6	309.9	254.1	217.5	202.1	200.2	204.0	223.3	257.9
62.5°	433.1	369.5	304.1	236.7	190.5	175.1	155.9	154.0	157.8	169.4	196.3
65°	311.8	271.4	221.3	173.2	136.7	115.5	107.8	109.7	113.5	121.3	146.3
67.5°	217.5	188.6	154.0	121.3	94.3	84.7	77.0	75.1	77.0	90.5	103.9
70°	146.3	128.9	103.9	92.4	65.5	51.9	53.9	48.1	55.8	55.8	67.3
72.5°	96.2	84.7	69.3	53.9	46.2	36.6	36.6	34.7	38.5	40.4	50.1
75°	50.1	38.5	38.5	26.9	19.3	9.6	17.3	15.4	13.5	15.4	19.3
77.5°	34.7	28.9	26.9	21.2	19.3	15.4	15.4	15.4	15.4	17.3	19.3
80°	21.2	21.2	15.4	13.5	11.5	9.6	11.5	11.5	11.5	11.5	13.5
82.5°	13.5	11.5	11.5	9.6	9.6	7.7	7.7	7.7	7.7	7.7	11.5
85°	11.5	7.7	7.7	5.8	7.7	13.5	5.8	7.7	7.7	7.7	5.8
87.5°	3.9	5.8	5.8	5.8	3.9	1.9	3.9	5.8	5.8	9.6	7.7
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°	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7	3585.7
2.5°	3591.5	3593.4	3593.4	3591.5	3591.5	3587.6	3595.3	3589.6	3591.5	3599.2	3593.4
5°	3595.3	3597.2	3597.2	3595.3	3595.3	3595.3	3597.2	3597.2	3595.3	3593.4	3597.2
7.5°	3603.0	3601.1	3601.1	3597.2	3597.2	3593.4	3597.2	3591.5	3595.3	3591.5	3597.2
10°	3593.4	3595.3	3593.4	3591.5	3591.5	3589.6	3589.6	3583.8	3585.7	3579.9	3583.8
12.5°	3587.6	3585.7	3585.7	3581.8	3578.0	3574.2	3572.2	3566.4	3566.4	3553.0	3558.8
15°	3572.2	3574.2	3568.4	3560.7	3556.8	3547.2	3543.4	3535.6	3528.0	3518.4	3520.3
17.5°	3558.8	3553.0	3545.3	3537.6	3522.2	3514.5	3506.8	3495.2	3491.4	3479.8	3476.0
20°	3518.4	3514.5	3504.9	3491.4	3481.8	3464.4	3456.8	3445.2	3435.6	3424.0	3418.2
22.5°	3466.4	3462.5	3451.0	3437.5	3422.1	3414.4	3406.7	3385.6	3375.9	3364.4	3362.4
25°	3401.0	3395.2	3383.6	3368.2	3360.5	3339.4	3331.6	3316.2	3312.4	3300.8	3298.9
27.5°	3300.8	3293.2	3279.7	3260.4	3247.0	3233.5	3225.8	3214.2	3210.4	3198.8	3196.9
30°	3150.7	3141.1	3114.1	3106.5	3083.4	3069.9	3069.9	3054.5	3056.4	3048.7	3048.7
32.5°	2914.0	2898.6	2877.4	2862.0	2846.6	2838.9	2838.9	2833.1	2837.0	2837.0	2840.9
35°	2600.3	2579.1	2567.5	2557.9	2557.9	2565.6	2588.7	2594.5	2606.0	2615.7	2623.4
37.5°	2198.0	2196.1	2209.6	2221.1	2250.0	2282.7	2323.1	2357.8	2390.5	2413.6	2436.7
40°	1763.0	1811.1	1849.6	1903.5	1947.8	2011.3	2084.4	2144.1	2199.9	2240.4	2282.7
42.5°	1376.1	1437.7	1518.6	1597.5	1676.4	1763.0	1859.3	1942.0	2015.2	2071.0	2115.2
45°	1072.1	1156.7	1254.9	1355.0	1457.0	1564.8	1664.9	1749.5	1826.5	1884.3	1928.6
47.5°	864.2	956.6	1068.2	1177.9	1293.4	1406.9	1518.6	1591.7	1655.2	1701.4	1741.9
50°	714.0	812.2	929.6	1054.7	1170.2	1283.8	1380.0	1451.2	1503.2	1543.6	1568.6
52.5°	596.6	700.6	825.7	950.8	1066.3	1170.2	1256.8	1310.7	1353.1	1381.9	1405.0
55°	492.7	592.8	710.2	827.6	941.2	1039.3	1110.5	1151.0	1183.7	1201.0	1214.5
57.5°	402.3	494.6	602.4	710.2	808.4	889.2	945.0	985.4	1000.8	1014.3	1012.4
60°	315.7	402.3	500.4	592.8	677.5	742.9	783.4	806.4	818.0	823.8	819.9
62.5°	248.3	327.2	402.3	483.1	544.7	600.5	639.0	639.0	644.8	646.7	652.5
65°	184.8	244.4	309.9	369.5	419.6	456.2	477.3	483.1	490.8	488.9	485.0
67.5°	136.7	180.9	229.0	273.3	307.9	331.0	346.4	359.9	358.0	354.1	352.2
70°	94.3	123.2	165.5	192.5	217.5	240.6	244.4	246.4	248.3	250.2	246.4
72.5°	65.5	86.6	109.7	132.8	148.2	157.8	167.5	169.4	169.4	169.4	167.5
75°	32.7	44.3	65.5	75.1	88.5	92.4	100.1	100.1	105.9	98.1	96.2
77.5°	28.9	34.7	46.2	53.9	59.7	65.5	67.3	73.1	71.2	67.3	69.3
80°	17.3	21.2	28.9	32.7	40.4	42.3	44.3	46.2	44.3	46.2	46.2
82.5°	13.5	15.4	19.3	19.3	25.0	25.0	26.9	26.9	28.9	28.9	28.9
85°	7.7	13.5	11.5	23.1	15.4	15.4	19.3	23.1	19.3	19.3	23.1
87.5°	7.7	7.7	5.8	7.7	7.7	7.7	9.6	11.5	11.5	13.5	11.5
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: P249500

CATALOG NUMBER: LSR8B100D010 EC8B1009727 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3585.7	3585.7	3585.7	3585.7
2.5°	3591.5	3595.3	3589.6	3587.6
5°	3597.2	3597.2	3593.4	3593.4
7.5°	3597.2	3597.2	3591.5	3587.6
10°	3581.8	3581.8	3576.1	3572.2
12.5°	3553.0	3553.0	3551.0	3545.3
15°	3516.4	3516.4	3508.7	3503.0
17.5°	3466.4	3470.2	3460.6	3460.6
20°	3412.5	3410.6	3402.9	3399.0
22.5°	3356.7	3352.8	3350.9	3339.4
25°	3297.0	3293.2	3287.4	3281.6
27.5°	3195.0	3193.1	3187.3	3179.6
30°	3039.1	3037.2	3029.5	3029.5
32.5°	2837.0	2835.1	2827.4	2829.3
35°	2627.2	2634.9	2631.1	2623.4
37.5°	2452.1	2457.8	2461.7	2457.8
40°	2305.8	2323.1	2325.0	2328.9
42.5°	2149.9	2173.0	2180.7	2184.5
45°	1963.2	1984.4	2001.7	1997.8
47.5°	1772.6	1788.0	1803.4	1791.9
50°	1589.8	1599.4	1605.2	1605.2
52.5°	1416.6	1416.6	1414.7	1416.6
55°	1218.3	1218.3	1210.6	1214.5
57.5°	1010.5	1014.3	1008.5	998.9
60°	818.0	808.4	804.5	798.8
62.5°	637.1	637.1	623.6	640.9
65°	477.3	471.6	465.8	463.8
67.5°	346.4	344.5	338.7	336.8
70°	244.4	236.7	234.8	231.0
72.5°	163.6	163.6	159.7	159.7
75°	100.1	90.5	88.5	90.5
77.5°	69.3	67.3	67.3	65.5
80°	46.2	44.3	48.1	42.3
82.5°	28.9	30.8	28.9	30.8
85°	19.3	23.1	21.2	21.2
87.5°	11.5	11.5	11.5	11.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)