

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: P249283

Luminaire Tested: **LSR8B90D010 EC8B909727 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249283
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: LSR8B90D010 EC8B909727 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6622.0 lumens
Efficiency: N/A
Efficacy: 76.9 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

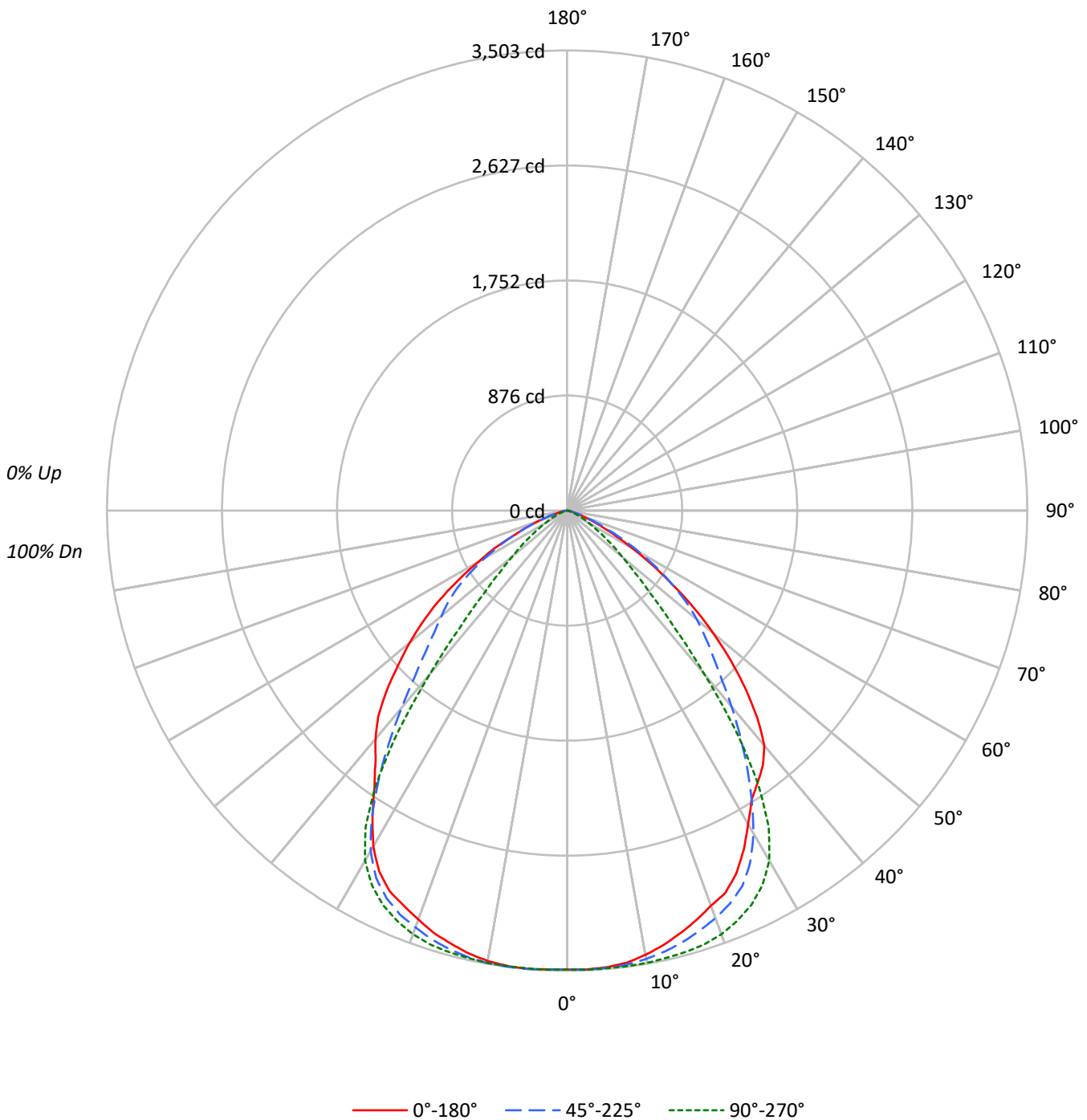
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	333.4	5.0
10°-20°	968.4	14.6
20°-30°	1469.8	22.2
30°-40°	1543.7	23.3
40°-50°	1157.4	17.5
50°-60°	742.6	11.2
60°-70°	317.7	4.8
70°-80°	75.1	1.1
80°-90°	14.0	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°	2771.6	41.9
0°-40°	4315.3	65.2
0°-60°	6215.3	93.9
0°-90°	6622.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6622.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3494	3494	3494	3494	3494	
5°	3488	3494	3498	3503	3501	331
15°	3331	3400	3479	3456	3413	939
25°	3048	3154	3314	3254	3198	1392
35°	2528	2387	2530	2500	2556	1587
45°	1920	1570	902	1525	1947	1471
55°	972	972	336	1013	1183	881
65°	293	345	107	444	452	312
75°	45	52	15	90	88	66
85°	15	9	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°	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9
2.5°	3495.8	3499.5	3497.7	3497.7	3495.8	3497.7	3497.7	3501.4	3501.4	3497.7	3495.8
5°	3488.3	3492.0	3492.0	3488.3	3488.3	3497.7	3492.0	3495.8	3495.8	3493.9	3493.9
7.5°	3471.4	3471.4	3478.9	3473.3	3473.3	3478.9	3477.0	3480.8	3484.5	3486.4	3486.4
10°	3433.9	3437.6	3439.5	3439.5	3441.4	3447.0	3450.8	3458.3	3462.0	3465.8	3467.6
12.5°	3387.0	3392.6	3394.5	3392.6	3398.3	3405.7	3415.2	3424.5	3430.2	3437.6	3443.3
15°	3330.7	3330.7	3334.5	3340.1	3343.9	3355.1	3364.5	3375.7	3390.7	3400.1	3409.5
17.5°	3268.9	3272.6	3278.2	3278.2	3285.7	3304.5	3310.1	3327.0	3343.9	3353.2	3372.0
20°	3201.4	3205.1	3210.7	3214.5	3223.8	3238.8	3250.1	3265.1	3283.9	3300.8	3319.5
22.5°	3148.8	3141.3	3145.1	3148.8	3158.2	3171.3	3184.5	3203.2	3222.0	3238.8	3257.6
25°	3047.5	3049.4	3055.1	3058.8	3070.1	3081.3	3096.3	3118.8	3135.7	3154.5	3175.1
27.5°	2910.7	2912.5	2921.9	2921.9	2931.3	2950.0	2959.4	2978.2	3000.7	3019.4	3043.8
30°	2755.0	2758.7	2758.7	2766.2	2771.8	2781.3	2790.6	2809.4	2820.6	2837.5	2871.3
32.5°	2612.5	2616.2	2614.3	2612.5	2606.8	2604.9	2603.1	2606.8	2610.6	2616.2	2629.3
35°	2528.1	2518.7	2511.2	2498.1	2483.1	2464.3	2447.4	2424.9	2404.3	2387.4	2368.7
37.5°	2447.4	2445.5	2434.3	2415.5	2385.5	2351.8	2312.4	2263.6	2214.9	2162.4	2111.7
40°	2334.9	2329.3	2319.9	2293.6	2259.9	2218.6	2166.1	2106.1	2027.3	1946.7	1864.2
42.5°	2143.6	2145.5	2134.2	2113.6	2081.7	2042.3	1987.9	1922.3	1837.9	1742.2	1635.4
45°	1920.4	1920.4	1916.7	1899.8	1877.3	1845.4	1804.1	1749.8	1667.3	1569.7	1455.3
47.5°	1687.9	1689.7	1684.1	1680.4	1671.0	1650.4	1620.4	1579.1	1521.0	1427.2	1312.8
50°	1451.6	1451.6	1460.9	1459.1	1459.1	1451.6	1438.5	1414.1	1363.4	1288.4	1181.5
52.5°	1215.3	1219.0	1224.7	1232.1	1241.5	1256.5	1241.5	1230.3	1198.4	1140.2	1048.4
55°	971.5	975.2	984.6	997.7	1009.0	1024.0	1027.7	1027.7	1010.8	971.5	902.1
57.5°	763.3	757.7	765.2	776.4	791.4	806.4	817.7	830.8	828.9	802.7	746.4
60°	573.9	575.8	581.4	592.6	603.9	617.0	632.0	643.3	648.9	635.8	600.1
62.5°	418.2	418.2	425.7	437.0	442.6	461.4	470.7	476.4	482.0	480.1	457.6
65°	292.6	296.3	300.1	305.7	311.3	322.6	328.2	339.4	343.2	345.1	328.2
67.5°	206.3	200.7	204.4	208.2	213.8	221.3	232.6	232.6	238.2	238.2	226.9
70°	131.3	131.3	133.2	138.8	142.5	144.4	148.2	151.9	157.5	155.7	155.7
72.5°	88.2	86.3	88.2	90.0	91.9	97.5	97.5	99.4	103.2	105.0	97.5
75°	45.0	46.9	50.6	48.8	54.4	50.6	52.5	58.1	56.3	52.5	52.5
77.5°	37.5	37.5	37.5	35.7	39.4	39.4	37.5	41.3	39.4	39.4	37.5
80°	26.2	28.1	26.2	24.4	26.2	24.4	24.4	24.4	24.4	24.4	22.5
82.5°	20.6	16.9	18.8	16.9	18.8	18.8	16.9	15.0	15.0	16.9	15.0
85°	15.0	11.2	13.1	13.1	11.2	11.2	11.2	11.2	11.2	9.4	9.4
87.5°	9.4	5.6	5.6	5.6	7.5	7.5	7.5	5.6	7.5	7.5	3.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9
2.5°	3499.5	3497.7	3501.4	3499.5	3499.5	3497.7	3499.5	3497.7	3501.4	3493.9	3495.8
5°	3499.5	3495.8	3497.7	3499.5	3501.4	3497.7	3497.7	3497.7	3501.4	3497.7	3499.5
7.5°	3492.0	3490.1	3495.8	3499.5	3497.7	3495.8	3499.5	3497.7	3501.4	3499.5	3503.3
10°	3477.0	3478.9	3482.7	3488.3	3490.1	3492.0	3495.8	3495.8	3501.4	3493.9	3497.7
12.5°	3454.5	3462.0	3471.4	3475.1	3482.7	3482.7	3486.4	3488.3	3492.0	3490.1	3495.8
15°	3426.4	3435.8	3447.0	3456.4	3465.8	3471.4	3477.0	3478.9	3484.5	3478.9	3480.8
17.5°	3392.6	3403.9	3420.8	3432.0	3447.0	3452.6	3460.1	3463.9	3469.5	3465.8	3467.6
20°	3345.7	3358.9	3377.6	3394.5	3403.9	3417.0	3426.4	3432.0	3435.8	3432.0	3433.9
22.5°	3280.1	3298.9	3323.2	3336.4	3355.1	3366.4	3368.3	3381.4	3390.7	3381.4	3385.1
25°	3203.2	3222.0	3240.7	3268.9	3285.7	3298.9	3312.0	3313.9	3323.2	3321.4	3319.5
27.5°	3075.7	3100.1	3131.9	3154.5	3176.9	3197.6	3212.6	3216.3	3225.7	3222.0	3223.8
30°	2901.2	2927.5	2957.6	2993.2	3025.1	3045.7	3064.4	3077.6	3086.9	3081.3	3079.4
32.5°	2653.7	2680.0	2711.9	2747.5	2785.0	2815.0	2837.5	2854.4	2865.6	2861.9	2852.5
35°	2370.5	2378.0	2398.7	2426.8	2458.7	2490.5	2511.2	2529.9	2543.0	2546.8	2546.8
37.5°	2079.8	2055.5	2040.5	2040.5	2059.2	2072.3	2091.1	2102.3	2123.0	2130.5	2136.1
40°	1798.5	1742.2	1689.7	1650.4	1624.1	1622.2	1622.2	1627.8	1646.6	1671.0	1693.5
42.5°	1547.2	1457.2	1376.6	1303.4	1250.9	1220.9	1207.8	1209.7	1224.7	1247.2	1284.6
45°	1346.5	1234.0	1132.8	1044.6	973.3	926.4	904.0	902.1	913.3	939.6	980.9
47.5°	1190.9	1070.9	956.5	855.2	778.3	727.7	701.4	693.9	701.4	725.8	774.6
50°	1061.5	937.7	819.6	714.5	632.0	579.5	555.1	545.8	555.1	575.8	624.5
52.5°	941.4	813.9	703.3	602.0	513.9	468.8	442.6	437.0	442.6	467.0	506.4
55°	802.7	693.9	585.1	483.8	407.0	362.0	341.3	335.7	341.3	363.8	405.1
57.5°	665.8	572.0	476.4	384.5	318.8	279.4	260.7	253.2	266.3	281.3	330.1
60°	538.2	463.2	382.6	301.9	247.6	211.9	196.9	195.0	198.8	217.6	251.3
62.5°	422.0	360.1	296.3	230.7	185.7	170.7	151.9	150.1	153.8	165.0	191.3
65°	303.8	264.5	215.7	168.8	133.2	112.5	105.0	106.9	110.6	118.2	142.5
67.5°	211.9	183.8	150.1	118.2	91.9	82.5	75.0	73.1	75.0	88.2	101.3
70°	142.5	125.6	101.3	90.0	63.8	50.6	52.5	46.9	54.4	54.4	65.6
72.5°	93.8	82.5	67.5	52.5	45.0	35.7	35.7	33.8	37.5	39.4	48.8
75°	48.8	37.5	37.5	26.2	18.8	9.4	16.9	15.0	13.1	15.0	18.8
77.5°	33.8	28.1	26.2	20.6	18.8	15.0	15.0	15.0	15.0	16.9	18.8
80°	20.6	20.6	15.0	13.1	11.2	9.4	11.2	11.2	11.2	11.2	13.1
82.5°	13.1	11.2	11.2	9.4	9.4	7.5	7.5	7.5	7.5	7.5	11.2
85°	11.2	7.5	7.5	5.6	7.5	13.1	5.6	7.5	7.5	7.5	5.6
87.5°	3.8	5.6	5.6	5.6	3.8	1.9	3.8	5.6	5.6	9.4	7.5
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°	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9	3493.9
2.5°	3499.5	3501.4	3501.4	3499.5	3499.5	3495.8	3503.3	3497.7	3499.5	3507.0	3501.4
5°	3503.3	3505.1	3505.1	3503.3	3503.3	3503.3	3505.1	3505.1	3503.3	3501.4	3505.1
7.5°	3510.8	3508.9	3508.9	3505.1	3505.1	3501.4	3505.1	3499.5	3503.3	3499.5	3505.1
10°	3501.4	3503.3	3501.4	3499.5	3499.5	3497.7	3497.7	3492.0	3493.9	3488.3	3492.0
12.5°	3495.8	3493.9	3493.9	3490.1	3486.4	3482.7	3480.8	3475.1	3475.1	3462.0	3467.6
15°	3480.8	3482.7	3477.0	3469.5	3465.8	3456.4	3452.6	3445.1	3437.6	3428.3	3430.2
17.5°	3467.6	3462.0	3454.5	3447.0	3432.0	3424.5	3417.0	3405.7	3402.0	3390.7	3387.0
20°	3428.3	3424.5	3415.2	3402.0	3392.6	3375.7	3368.3	3357.0	3347.6	3336.4	3330.7
22.5°	3377.6	3373.9	3362.6	3349.5	3334.5	3327.0	3319.5	3298.9	3289.5	3278.2	3276.3
25°	3313.9	3308.2	3297.0	3282.0	3274.5	3253.9	3246.3	3231.3	3227.6	3216.3	3214.5
27.5°	3216.3	3208.8	3195.7	3176.9	3163.8	3150.7	3143.2	3131.9	3128.2	3116.9	3115.1
30°	3070.1	3060.7	3034.4	3026.9	3004.4	2991.3	2991.3	2976.3	2978.2	2970.7	2970.7
32.5°	2839.4	2824.4	2803.7	2788.7	2773.7	2766.2	2766.2	2760.6	2764.4	2764.4	2768.1
35°	2533.7	2513.1	2501.8	2492.4	2492.4	2499.9	2522.4	2528.1	2539.3	2548.7	2556.2
37.5°	2141.7	2139.9	2153.0	2164.2	2192.4	2224.3	2263.6	2297.4	2329.3	2351.8	2374.3
40°	1717.9	1764.8	1802.3	1854.8	1897.9	1959.8	2031.1	2089.2	2143.6	2183.0	2224.3
42.5°	1340.9	1400.9	1479.7	1556.6	1633.5	1717.9	1811.7	1892.3	1963.6	2017.9	2061.1
45°	1044.6	1127.1	1222.8	1320.3	1419.7	1524.7	1622.2	1704.8	1779.8	1836.0	1879.2
47.5°	842.1	932.1	1040.8	1147.8	1260.3	1370.9	1479.7	1551.0	1612.8	1657.9	1697.3
50°	695.8	791.4	905.8	1027.7	1140.2	1250.9	1344.7	1414.1	1464.7	1504.1	1528.5
52.5°	581.4	682.6	804.6	926.4	1039.0	1140.2	1224.7	1277.2	1318.4	1346.5	1369.0
55°	480.1	577.6	692.0	806.4	917.1	1012.7	1082.1	1121.5	1153.4	1170.2	1183.4
57.5°	392.0	482.0	587.0	692.0	787.7	866.5	920.8	960.2	975.2	988.3	986.5
60°	307.6	392.0	487.6	577.6	660.2	723.9	763.3	785.8	797.0	802.7	798.9
62.5°	241.9	318.8	392.0	470.7	530.7	585.1	622.7	622.7	628.3	630.1	635.8
65°	180.0	238.2	301.9	360.1	408.8	444.5	465.1	470.7	478.2	476.4	472.6
67.5°	133.2	176.3	223.2	266.3	300.1	322.6	337.6	350.7	348.8	345.1	343.2
70°	91.9	120.0	161.3	187.5	211.9	234.4	238.2	240.0	241.9	243.8	240.0
72.5°	63.8	84.4	106.9	129.4	144.4	153.8	163.2	165.0	165.0	165.0	163.2
75°	31.9	43.1	63.8	73.1	86.3	90.0	97.5	97.5	103.2	95.6	93.8
77.5°	28.1	33.8	45.0	52.5	58.1	63.8	65.6	71.3	69.4	65.6	67.5
80°	16.9	20.6	28.1	31.9	39.4	41.3	43.1	45.0	43.1	45.0	45.0
82.5°	13.1	15.0	18.8	18.8	24.4	24.4	26.2	26.2	28.1	28.1	28.1
85°	7.5	13.1	11.2	22.5	15.0	15.0	18.8	22.5	18.8	18.8	22.5
87.5°	7.5	7.5	5.6	7.5	7.5	7.5	9.4	11.2	11.2	13.1	11.2
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: P249283

CATALOG NUMBER: LSR8B90D010 EC8B909727 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3493.9	3493.9	3493.9	3493.9
2.5°	3499.5	3503.3	3497.7	3495.8
5°	3505.1	3505.1	3501.4	3501.4
7.5°	3505.1	3505.1	3499.5	3495.8
10°	3490.1	3490.1	3484.5	3480.8
12.5°	3462.0	3462.0	3460.1	3454.5
15°	3426.4	3426.4	3418.9	3413.3
17.5°	3377.6	3381.4	3372.0	3372.0
20°	3325.1	3323.2	3315.8	3312.0
22.5°	3270.7	3267.0	3265.1	3253.9
25°	3212.6	3208.8	3203.2	3197.6
27.5°	3113.2	3111.3	3105.7	3098.2
30°	2961.3	2959.4	2951.9	2951.9
32.5°	2764.4	2762.5	2755.0	2756.9
35°	2559.9	2567.5	2563.7	2556.2
37.5°	2389.3	2394.9	2398.7	2394.9
40°	2246.7	2263.6	2265.5	2269.3
42.5°	2094.9	2117.3	2124.9	2128.6
45°	1912.9	1933.6	1950.4	1946.7
47.5°	1727.2	1742.2	1757.3	1746.0
50°	1549.1	1558.5	1564.1	1564.1
52.5°	1380.3	1380.3	1378.4	1380.3
55°	1187.1	1187.1	1179.7	1183.4
57.5°	984.6	988.3	982.7	973.3
60°	797.0	787.7	783.9	778.3
62.5°	620.8	620.8	607.7	624.5
65°	465.1	459.5	453.8	452.0
67.5°	337.6	335.7	330.1	328.2
70°	238.2	230.7	228.8	225.0
72.5°	159.4	159.4	155.7	155.7
75°	97.5	88.2	86.3	88.2
77.5°	67.5	65.6	65.6	63.8
80°	45.0	43.1	46.9	41.3
82.5°	28.1	30.0	28.1	30.0
85°	18.8	22.5	20.6	20.6
87.5°	11.2	11.2	11.2	11.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)