

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: P249777

Luminaire Tested: **LSR8B80D010 EC8B809730 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B809730 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: 6518.0 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

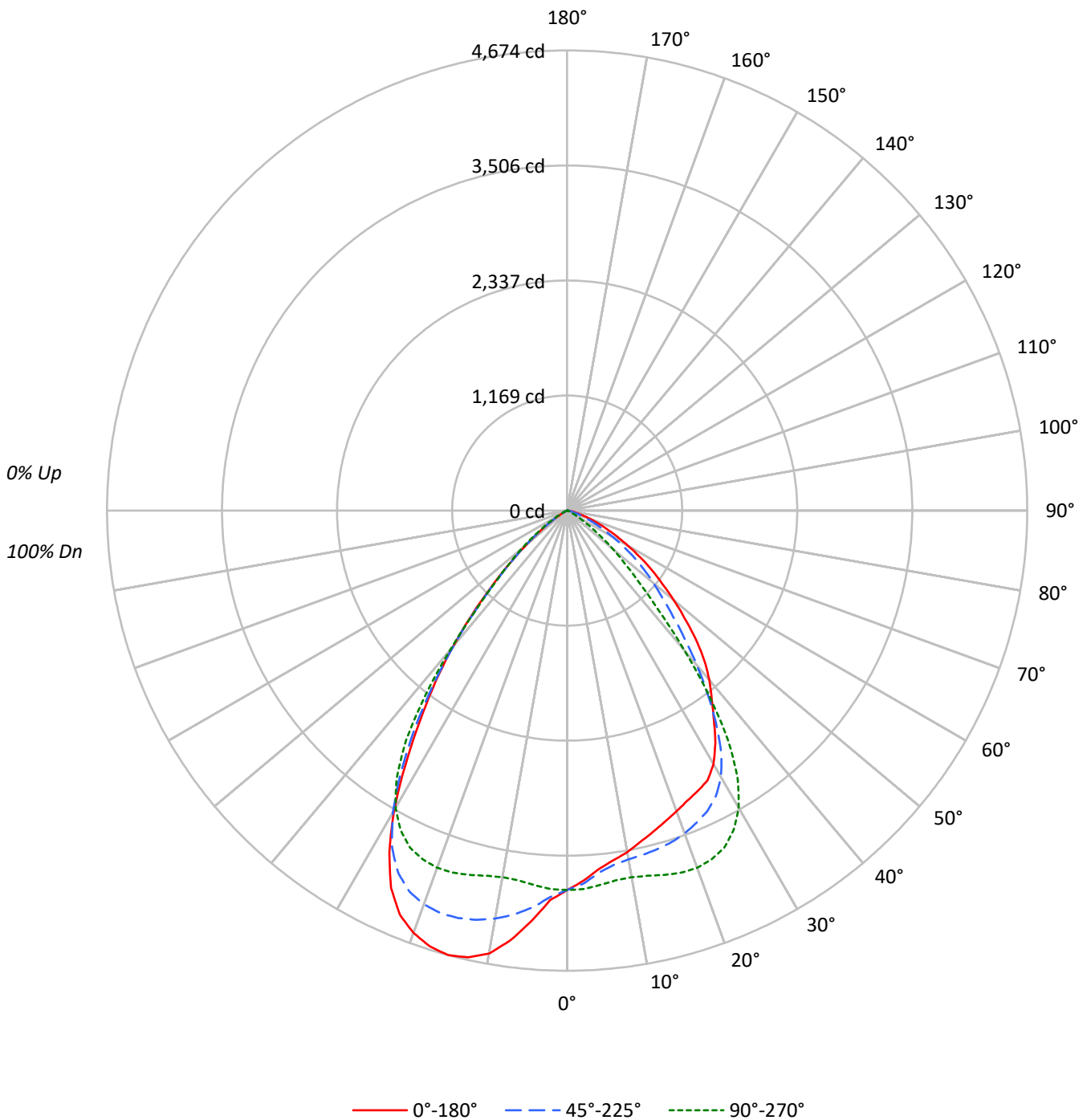
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0			
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91	91	91	91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82	82	82	82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73	73	73	73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66	66	66	66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60	60	60	60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54	54	54	54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49	49	49	49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45	45	45	45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42	42	42	42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38	38	38	38			

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°	370.5	5.7
10°-20°	1108.9	17.0
20°-30°	1698.2	26.1
30°-40°	1664.8	25.5
40°-50°	1002.5	15.4
50°-60°	461.4	7.1
60°-70°	162.1	2.5
70°-80°	42.4	0.7
80°-90°	7.2	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°	3177.6	48.8
0°-40°	4842.3	74.3
0°-60°	6306.3	96.8
0°-90°	6518.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6518.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3854	3854	3854	3854	3854	
5°	3658	3692	3818	4047	4186	345
15°	3377	3559	3831	4285	4674	954
25°	3141	3368	3777	4061	4230	1447
35°	2599	2635	2853	2689	2602	1628
45°	1846	1520	1030	1037	1064	1416
55°	1048	830	295	232	223	935
65°	445	308	47	23	25	453
75°	115	67	4	0	0	140
85°	18	9	2	0	0	25
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°	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1
2.5°	3764.0	3767.7	3767.7	3767.7	3774.9	3776.7	3774.9	3776.7	3780.3	3792.9	3798.3
5°	3657.8	3652.4	3656.0	3654.2	3663.2	3668.6	3665.0	3670.4	3683.0	3692.1	3701.0
7.5°	3582.2	3582.2	3582.2	3585.8	3591.2	3602.0	3600.2	3603.8	3616.4	3629.0	3641.6
10°	3522.7	3521.0	3521.0	3529.9	3537.1	3549.7	3553.4	3564.2	3580.3	3596.6	3611.0
12.5°	3445.3	3447.1	3456.1	3465.1	3481.3	3501.1	3511.9	3526.4	3551.6	3578.6	3594.8
15°	3376.9	3378.6	3385.9	3403.8	3423.7	3447.1	3470.5	3493.9	3524.5	3558.8	3587.6
17.5°	3310.2	3312.0	3317.4	3337.3	3362.5	3393.1	3420.1	3450.7	3490.3	3529.9	3566.0
20°	3249.0	3247.2	3256.2	3274.2	3306.7	3335.4	3362.5	3398.5	3441.7	3490.3	3531.7
22.5°	3189.5	3189.5	3198.6	3216.6	3245.4	3274.2	3303.0	3340.8	3384.0	3430.9	3479.5
25°	3140.9	3139.1	3151.7	3160.8	3182.3	3211.2	3241.8	3272.4	3315.6	3367.9	3414.7
27.5°	3088.7	3086.9	3088.7	3099.5	3119.3	3140.9	3164.3	3191.4	3227.4	3270.6	3315.6
30°	2973.4	2975.2	2975.2	2984.3	2995.1	3018.4	3031.0	3058.1	3090.5	3126.5	3166.2
32.5°	2802.3	2804.1	2804.1	2807.8	2816.7	2827.6	2838.4	2858.2	2883.4	2914.0	2950.0
35°	2598.9	2598.9	2597.0	2598.9	2604.3	2604.3	2613.2	2604.3	2616.9	2634.9	2661.9
37.5°	2411.5	2407.9	2404.3	2400.7	2395.3	2386.3	2373.7	2352.1	2346.7	2339.5	2341.3
40°	2245.9	2244.1	2233.2	2224.2	2206.2	2184.6	2154.0	2116.2	2085.6	2049.6	2018.9
42.5°	2062.2	2060.3	2051.3	2035.1	2015.3	1982.9	1934.3	1883.9	1822.6	1768.6	1712.8
45°	1846.0	1851.4	1838.8	1820.8	1797.4	1766.7	1712.8	1651.5	1590.2	1520.0	1449.8
47.5°	1620.9	1619.1	1610.1	1599.3	1579.5	1548.9	1512.9	1446.2	1381.3	1316.6	1244.5
50°	1412.0	1404.8	1401.1	1390.4	1377.8	1352.6	1314.7	1260.7	1203.1	1141.8	1075.2
52.5°	1213.9	1213.9	1204.8	1197.6	1186.8	1167.0	1134.6	1091.4	1042.8	985.1	914.9
55°	1048.2	1044.6	1035.6	1026.6	1015.7	1003.1	974.4	938.3	886.1	830.3	769.0
57.5°	871.7	869.8	866.3	855.5	850.1	837.4	805.1	769.0	724.0	675.4	624.9
60°	713.2	706.0	698.8	691.6	682.6	670.0	648.3	617.7	579.9	536.7	486.3
62.5°	571.0	581.7	560.1	560.1	542.1	531.3	511.5	493.5	453.8	414.2	371.0
65°	444.9	444.9	435.8	428.6	417.8	405.2	385.4	367.4	338.6	307.9	277.3
67.5°	340.4	338.6	329.6	322.4	313.3	306.2	291.8	270.1	248.6	223.4	198.1
70°	250.3	248.6	246.7	234.1	226.9	217.9	207.1	192.7	176.5	158.5	135.1
72.5°	180.1	180.1	174.7	169.3	162.1	154.9	144.1	135.1	120.7	108.1	91.8
75°	115.3	113.5	113.5	104.4	104.4	93.6	86.4	81.0	73.8	66.6	52.3
77.5°	82.9	81.0	79.2	75.6	72.1	68.4	63.0	55.8	50.4	43.2	37.8
80°	55.8	52.3	50.4	50.4	45.0	43.2	45.0	34.2	32.4	27.0	23.4
82.5°	34.2	34.2	32.4	32.4	30.6	28.8	23.4	23.4	21.6	19.8	16.2
85°	18.0	23.4	16.2	18.0	16.2	18.0	16.2	12.6	10.8	9.0	9.0
87.5°	10.8	7.2	7.2	10.8	9.0	7.2	7.2	7.2	5.4	3.6	3.6
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°	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1
2.5°	3794.7	3807.3	3805.5	3821.7	3827.1	3839.7	3839.7	3848.7	3854.1	3866.7	3877.5
5°	3704.7	3724.5	3729.9	3749.7	3765.9	3785.7	3798.3	3818.1	3836.1	3863.2	3888.4
7.5°	3648.8	3665.0	3675.8	3699.2	3717.3	3738.8	3760.5	3787.5	3812.7	3845.1	3881.2
10°	3621.8	3643.4	3659.6	3683.0	3704.7	3728.1	3749.7	3780.3	3809.1	3850.5	3890.1
12.5°	3614.6	3639.8	3659.6	3692.1	3713.6	3738.8	3764.0	3798.3	3828.9	3872.1	3917.2
15°	3614.6	3648.8	3675.8	3711.9	3737.1	3769.5	3796.5	3830.7	3864.9	3909.9	3953.1
17.5°	3607.4	3648.8	3683.0	3724.5	3756.8	3789.3	3823.5	3856.0	3891.9	3935.2	3983.8
20°	3578.6	3630.8	3672.2	3720.8	3755.1	3791.1	3825.3	3861.3	3899.2	3944.2	3985.6
22.5°	3528.2	3589.4	3636.2	3688.4	3728.1	3764.0	3798.3	3834.3	3875.8	3919.0	3962.2
25°	3461.5	3519.1	3569.6	3623.6	3663.2	3702.8	3735.3	3776.7	3814.5	3856.0	3890.1
27.5°	3360.6	3421.9	3470.5	3526.4	3562.3	3600.2	3627.2	3661.4	3697.5	3731.6	3758.7
30°	3209.4	3265.2	3315.6	3366.0	3402.1	3429.1	3457.9	3484.9	3508.4	3531.7	3555.1
32.5°	2987.8	3038.3	3086.9	3133.7	3162.5	3186.0	3207.5	3223.8	3236.4	3249.0	3250.8
35°	2683.5	2724.9	2755.5	2796.9	2824.0	2845.6	2845.6	2852.8	2851.0	2845.6	2840.2
37.5°	2343.1	2359.3	2371.9	2388.1	2389.9	2389.9	2379.1	2370.1	2355.7	2352.1	2341.3
40°	1988.3	1966.7	1950.4	1928.9	1916.3	1889.2	1865.9	1849.6	1826.2	1822.6	1819.0
42.5°	1651.5	1601.1	1556.1	1518.3	1475.0	1437.2	1403.0	1377.8	1359.8	1357.9	1359.8
45°	1377.8	1320.1	1253.5	1201.3	1152.7	1105.8	1060.8	1030.2	1014.0	1010.3	1014.0
47.5°	1170.7	1104.0	1039.2	979.7	927.5	875.3	830.3	788.8	769.0	763.6	761.8
50°	1006.8	938.3	869.8	808.6	751.0	698.8	642.9	603.3	578.1	569.1	561.9
52.5°	846.5	785.3	715.0	652.0	594.3	533.1	475.5	430.4	405.2	394.4	387.2
55°	706.0	644.8	579.9	518.7	457.5	396.2	338.6	295.3	268.4	255.7	246.7
57.5°	563.7	506.1	450.3	389.0	338.6	279.2	221.5	183.7	160.3	145.9	138.7
60°	435.8	390.8	342.2	291.8	243.1	194.5	147.7	111.6	93.6	82.9	73.8
62.5°	329.6	291.8	259.3	216.1	178.3	136.8	100.9	72.1	55.8	46.9	43.2
65°	237.7	208.9	180.1	153.1	126.1	95.5	68.4	46.9	32.4	27.0	25.2
67.5°	169.3	145.9	124.2	106.2	86.4	68.4	48.6	32.4	25.2	21.6	19.8
70°	118.8	100.9	86.4	70.3	57.6	45.0	37.8	23.4	14.4	16.2	12.6
72.5°	79.2	66.6	59.5	48.6	39.6	32.4	23.4	16.2	16.2	12.6	10.8
75°	43.2	39.6	30.6	23.4	19.8	18.0	7.2	3.6	1.8	5.4	1.8
77.5°	30.6	27.0	23.4	19.8	16.2	12.6	7.2	7.2	5.4	7.2	3.6
80°	19.8	16.2	14.4	14.4	9.0	5.4	3.6	3.6	5.4	1.8	1.8
82.5°	12.6	10.8	9.0	9.0	9.0	5.4	5.4	5.4	5.4	3.6	3.6
85°	7.2	5.4	3.6	3.6	1.8	3.6	0.0	1.8	1.8	0.0	0.0
87.5°	3.6	1.8	1.8	1.8	1.8	0.0	0.0	1.8	0.0	1.8	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1	3854.1
2.5°	3884.7	3891.9	3901.0	3908.1	3924.4	3927.9	3935.2	3942.4	3947.8	3953.1	3955.0
5°	3909.9	3937.0	3962.2	3989.2	4023.4	4046.8	4073.8	4097.3	4120.7	4140.5	4154.9
7.5°	3917.2	3958.6	3996.4	4043.2	4093.6	4136.9	4181.9	4226.9	4273.8	4309.8	4340.4
10°	3931.6	3982.0	4030.6	4086.4	4151.3	4208.9	4264.7	4324.2	4383.6	4434.0	4479.1
12.5°	3956.8	4012.6	4064.9	4126.1	4192.7	4257.5	4318.8	4385.4	4448.5	4504.3	4554.7
15°	3998.2	4050.4	4100.9	4158.5	4225.1	4284.6	4345.8	4410.6	4473.7	4531.3	4578.1
17.5°	4025.2	4073.8	4124.2	4176.5	4232.3	4286.4	4344.0	4401.6	4459.2	4511.5	4554.7
20°	4025.2	4072.1	4109.9	4156.7	4208.9	4255.7	4302.6	4353.0	4403.4	4446.6	4488.1
22.5°	3992.8	4037.8	4066.6	4102.7	4147.7	4187.3	4212.5	4268.3	4306.2	4344.0	4374.6
25°	3917.2	3949.6	3973.0	3998.2	4034.2	4061.2	4082.9	4115.3	4153.1	4167.5	4189.1
27.5°	3780.3	3803.7	3816.3	3821.7	3839.7	3854.1	3857.7	3872.1	3888.4	3891.9	3901.0
30°	3564.2	3566.0	3560.6	3558.8	3549.7	3539.0	3537.1	3535.3	3528.2	3521.0	3522.7
32.5°	3238.2	3229.2	3207.5	3184.2	3160.8	3135.6	3121.1	3103.1	3092.3	3081.5	3068.9
35°	2816.7	2795.2	2764.5	2735.7	2708.7	2688.9	2656.5	2645.6	2634.9	2620.4	2616.9
37.5°	2321.5	2308.9	2280.0	2258.5	2244.1	2235.0	2218.8	2208.0	2208.0	2202.6	2199.0
40°	1810.0	1806.4	1795.6	1801.0	1793.8	1797.4	1795.6	1792.0	1801.0	1801.0	1804.6
42.5°	1357.9	1359.8	1365.2	1368.7	1379.6	1381.3	1390.4	1390.4	1395.8	1401.1	1404.8
45°	1010.3	1017.6	1017.6	1024.8	1035.6	1037.4	1040.9	1042.8	1046.3	1055.4	1059.0
47.5°	758.2	760.0	760.0	761.8	765.4	769.0	767.2	769.0	774.4	770.8	774.4
50°	560.1	561.9	556.5	551.1	556.5	556.5	554.7	549.3	554.7	547.5	551.1
52.5°	381.8	380.0	374.6	376.4	372.8	371.0	371.0	367.4	367.4	367.4	360.2
55°	241.4	241.4	237.7	237.7	236.0	232.3	230.5	228.7	226.9	225.1	225.1
57.5°	135.1	136.8	131.5	129.7	131.5	129.7	126.1	126.1	126.1	120.7	124.2
60°	73.8	72.1	70.3	68.4	66.6	68.4	68.4	64.9	64.9	64.9	66.6
62.5°	39.6	39.6	37.8	37.8	36.0	36.0	39.6	34.2	36.0	34.2	36.0
65°	21.6	27.0	19.8	19.8	25.2	23.4	21.6	21.6	23.4	19.8	21.6
67.5°	23.4	16.2	14.4	16.2	14.4	14.4	14.4	18.0	16.2	12.6	16.2
70°	10.8	12.6	12.6	9.0	14.4	7.2	12.6	7.2	10.8	9.0	10.8
72.5°	10.8	10.8	10.8	7.2	10.8	7.2	9.0	9.0	7.2	7.2	10.8
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.6	3.6	1.8	1.8	1.8	1.8	3.6	3.6	3.6	0.0	1.8
80°	3.6	3.6	0.0	1.8	0.0	0.0	1.8	0.0	1.8	0.0	3.6
82.5°	1.8	3.6	1.8	1.8	3.6	3.6	3.6	1.8	1.8	1.8	1.8
85°	0.0	1.8	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	1.8
87.5°	0.0	1.8	0.0	0.0	0.0	0.0	1.8	1.8	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: P249777

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3854.1	3854.1	3854.1	3854.1
2.5°	3956.8	3958.6	3962.2	3960.4
5°	4165.7	4180.1	4187.3	4185.5
7.5°	4362.0	4387.3	4401.6	4401.6
10°	4513.3	4542.1	4563.7	4567.3
12.5°	4594.3	4626.8	4655.6	4648.3
15°	4617.7	4650.2	4679.0	4673.5
17.5°	4590.7	4623.1	4644.8	4641.1
20°	4516.9	4543.9	4565.5	4563.7
22.5°	4401.6	4425.1	4443.1	4441.2
25°	4207.1	4223.4	4237.7	4230.5
27.5°	3908.1	3913.6	3922.5	3911.8
30°	3510.1	3513.7	3517.3	3515.6
32.5°	3063.5	3061.7	3058.1	3054.5
35°	2611.5	2611.5	2613.2	2602.4
37.5°	2200.8	2199.0	2204.4	2199.0
40°	1808.2	1806.4	1813.6	1804.6
42.5°	1410.2	1415.6	1417.4	1417.4
45°	1060.8	1062.6	1064.4	1064.4
47.5°	774.4	776.2	785.3	774.4
50°	547.5	549.3	551.1	547.5
52.5°	362.0	363.8	362.0	356.6
55°	221.5	223.4	223.4	223.4
57.5°	118.8	120.7	120.7	118.8
60°	64.9	63.0	64.9	61.2
62.5°	34.2	37.8	36.0	32.4
65°	21.6	21.6	21.6	25.2
67.5°	18.0	14.4	16.2	12.6
70°	10.8	12.6	12.6	9.0
72.5°	9.0	9.0	9.0	10.8
75°	0.0	0.0	0.0	0.0
77.5°	3.6	3.6	3.6	1.8
80°	1.8	0.0	1.8	0.0
82.5°	1.8	1.8	3.6	1.8
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)