

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: METALUX

Report Number: P237897

Luminaire Tested: **8VT2-LD5-22-DR100-W-UNV-L840-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-15)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8VT2-LD5-22-DR100-W-UNV-L840-CD2-WL-U
Description: METALUX VT2 LED LUMINAIRE
INTERNAL PRISMATIC LENS/100% DR HIGH IMPACT ADDITIVE WIDE DISTRIBUTION
8FT FIXTURE
Light Source: (448) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19917.0 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.58 / 1.57
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')
CIE Type: Semi-Direct

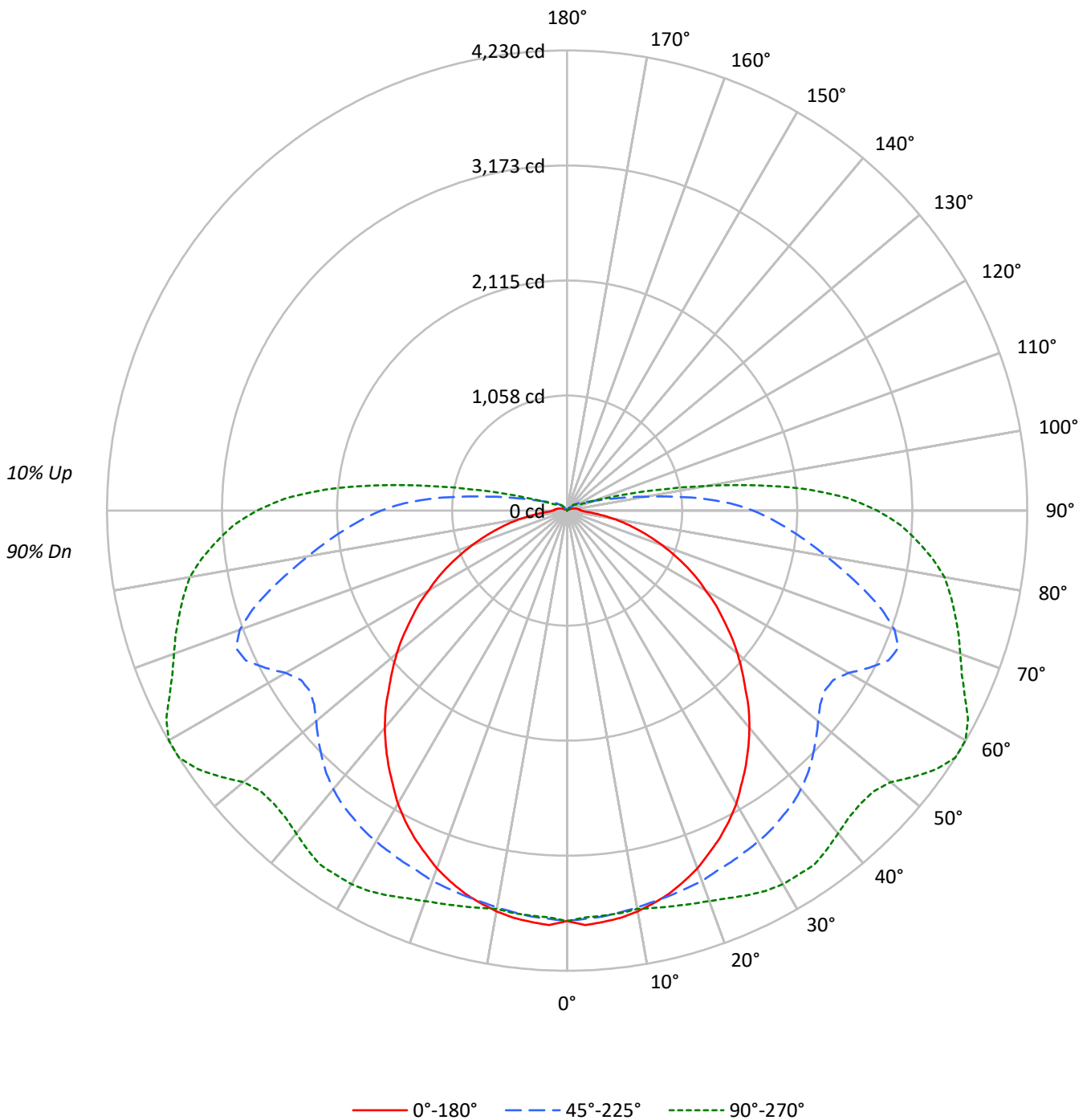
Input Watts (W): 164.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	101	94	88	83	97	91	85	80	85	80	76	79	75	72	74	71	68	65
2	90	79	71	63	86	77	69	62	71	64	59	66	61	56	62	57	53	50
3	81	68	58	50	77	66	57	49	61	53	47	57	50	45	53	47	43	40
4	73	59	49	41	70	57	48	40	53	45	39	50	43	37	46	40	35	33
5	67	52	42	35	64	51	41	34	47	39	33	44	37	31	41	35	30	27
6	62	47	37	30	59	45	36	29	42	34	28	40	32	27	37	31	26	23
7	57	42	33	26	55	41	32	25	38	30	24	36	29	24	34	27	23	20
8	53	38	29	23	51	37	28	22	35	27	22	33	26	21	31	25	20	18
9	49	35	26	20	47	34	26	20	32	24	19	30	23	19	28	22	18	16
10	46	32	24	18	44	31	23	18	30	22	17	28	21	17	26	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9745	9745	9745
5°	9826	9507	9419
10°	9779	9307	9210
15°	9687	9181	9243
20°	9554	9131	9364
25°	9376	9103	9628
30°	9174	9159	9921
35°	8903	9234	10147
40°	8645	9321	10210
45°	8296	9330	10444
50°	8025	9327	11166
55°	7692	9589	12643
60°	7350	10766	13846
65°	7048	12975	14379
70°	6644	14343	15161
75°	6191	14623	16419
80°	5799	14884	18124
85°	5361	15816	19911



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	357.8	1.8
10°-20°	1044.3	5.2
20°-30°	1659.6	8.3
30°-40°	2145.3	10.8
40°-50°	2420.9	12.2
50°-60°	2653.9	13.3
60°-70°	2832.0	14.2
70°-80°	2654.8	13.3
80°-90°	2138.2	10.7
90°-100°	1331.4	6.7
100°-110°	431.6	2.2
110°-120°	140.8	0.7
120°-130°	72.1	0.4
130°-140°	29.7	0.1
140°-150°	4.6	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3061.7	15.4
0°-40°	5207.0	26.1
0°-60°	10281.7	51.6
0°-90°	17906.7	89.9
90°-120°	1903.8	9.6
90°-150°	2010.3	10.1
90°-180°	2010.0	10.1
0°-180°	19917.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3772	3772	3772	3772	3772	
5°	3796	3783	3746	3751	3738	361
15°	3642	3642	3662	3757	3764	1026
25°	3320	3364	3566	3817	3903	1529
35°	2863	3025	3440	3835	3968	1791
45°	2316	2601	3192	3631	3812	1793
55°	1757	2131	2889	3838	4144	1574
65°	1202	1686	3260	3948	4034	1190
75°	667	1631	2831	3425	3691	711
85°	222	1116	2057	2915	3231	228
90°	128	834	1710	2538	2852	73
95°	112	580	1257	1968	2227	88
105°	76	209	416	538	601	79
115°	37	94	188	167	144	38
125°	16	31	112	115	99	14
135°	5	0	44	68	65	5
145°	3	0	0	13	13	2
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	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°	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3
2.5°	3814.1	3803.7	3795.8	3795.8	3795.8	3793.2	3793.2	3790.6	3785.4	3769.7	3756.6
5°	3795.8	3790.6	3782.8	3782.8	3782.8	3782.8	3782.8	3777.5	3767.1	3756.6	3746.2
7.5°	3774.9	3769.7	3759.2	3761.8	3754.0	3756.6	3754.0	3748.8	3746.2	3738.3	3725.2
10°	3740.9	3735.7	3725.2	3727.9	3722.6	3725.2	3725.2	3727.9	3722.6	3714.8	3704.3
12.5°	3693.9	3691.3	3686.0	3683.4	3688.6	3693.9	3696.5	3691.3	3686.0	3683.4	3680.8
15°	3641.6	3636.4	3631.1	3633.8	3641.6	3641.6	3649.4	3649.4	3649.4	3652.0	3662.5
17.5°	3573.6	3571.0	3565.8	3571.0	3576.2	3578.9	3589.3	3594.5	3597.2	3618.1	3641.6
20°	3500.4	3495.2	3490.0	3495.2	3503.0	3513.5	3524.0	3539.6	3563.2	3597.2	3623.3
22.5°	3408.9	3406.3	3403.7	3408.9	3422.0	3437.7	3456.0	3490.0	3526.6	3563.2	3586.7
25°	3320.0	3314.8	3312.2	3322.7	3348.8	3364.5	3388.0	3432.5	3474.3	3521.3	3565.8
27.5°	3220.7	3205.0	3218.1	3228.5	3262.5	3283.4	3312.2	3369.7	3416.8	3469.1	3537.0
30°	3110.9	3103.1	3103.1	3126.6	3171.0	3202.4	3236.4	3301.7	3356.6	3429.8	3513.5
32.5°	2982.8	2985.4	2990.7	3022.0	3082.2	3118.8	3147.5	3223.3	3293.9	3385.4	3482.1
35°	2862.6	2857.3	2870.4	2914.8	2982.8	3024.6	3063.9	3144.9	3233.8	3335.7	3440.3
37.5°	2737.1	2731.8	2750.1	2802.4	2875.6	2920.1	2964.5	3066.5	3168.4	3283.4	3401.1
40°	2606.4	2606.4	2627.3	2684.8	2765.8	2812.9	2865.2	2980.2	3092.6	3218.1	3343.6
42.5°	2470.4	2465.2	2491.3	2569.8	2661.3	2708.3	2771.1	2891.3	3019.4	3144.9	3275.6
45°	2316.2	2337.1	2363.2	2441.7	2535.8	2601.1	2674.3	2802.4	2933.1	3066.5	3191.9
47.5°	2180.3	2195.9	2232.5	2316.2	2426.0	2486.1	2564.5	2700.5	2841.6	2969.7	3103.1
50°	2044.3	2052.2	2101.8	2185.5	2300.5	2376.3	2452.1	2590.7	2729.2	2875.6	3011.6
52.5°	1903.1	1905.8	1965.9	2046.9	2182.9	2258.7	2329.3	2475.7	2624.7	2776.3	2930.5
55°	1756.7	1764.6	1827.3	1916.2	2060.0	2130.6	2209.0	2360.6	2522.7	2695.2	2888.7
57.5°	1623.4	1631.3	1691.4	1788.1	1937.1	2012.9	2088.8	2253.4	2431.2	2645.6	2899.2
60°	1471.8	1492.7	1547.6	1657.4	1809.0	1884.8	1973.7	2156.7	2378.9	2663.9	2985.4
62.5°	1343.7	1348.9	1411.7	1531.9	1691.4	1775.0	1871.8	2094.0	2386.8	2744.9	3129.2
65°	1202.5	1215.6	1281.0	1416.9	1586.8	1686.2	1801.2	2086.1	2460.0	2886.1	3259.9
67.5°	1061.4	1082.3	1160.7	1309.7	1505.8	1626.0	1772.4	2141.0	2577.6	2993.3	3296.5
70°	928.0	954.2	1043.1	1215.6	1450.9	1602.5	1790.7	2222.1	2658.7	3001.1	3202.4
72.5°	794.7	831.3	946.3	1145.0	1430.0	1618.2	1832.6	2271.7	2640.4	2875.6	3035.1
75°	666.6	708.5	857.5	1090.1	1427.4	1631.3	1848.2	2224.7	2486.1	2682.2	2831.2
77.5°	551.6	601.3	773.8	1045.7	1409.1	1599.9	1775.0	2065.2	2282.2	2465.2	2616.8
80°	434.0	499.3	700.6	988.2	1320.2	1471.8	1615.6	1858.7	2054.8	2240.4	2418.1
82.5°	321.5	407.8	622.2	901.9	1168.6	1304.5	1416.9	1639.1	1837.8	2031.2	2235.1
85°	222.2	321.5	528.1	768.6	998.6	1116.3	1226.1	1437.8	1633.9	1837.8	2057.4
87.5°	154.2	253.6	439.2	650.9	862.7	962.0	1061.4	1265.3	1461.3	1662.6	1887.5
90°	128.1	201.3	366.0	551.6	739.8	833.9	928.0	1113.7	1307.1	1500.6	1709.7
92.5°	120.3	167.3	300.6	462.7	632.6	711.1	794.7	967.3	1139.8	1325.4	1503.2
95°	112.4	133.3	237.9	368.6	512.4	580.4	650.9	786.9	943.7	1095.4	1257.4
97.5°	102.0	109.8	183.0	287.6	402.6	460.1	512.4	622.2	745.0	860.1	975.1
100°	94.1	94.1	138.6	219.6	311.1	352.9	397.4	488.9	569.9	656.2	737.2
102.5°	83.7	83.7	107.2	164.7	237.9	271.9	311.1	373.8	434.0	494.1	551.6
105°	75.8	73.2	86.3	128.1	180.4	209.1	237.9	290.2	337.2	376.4	415.7
107.5°	65.4	65.4	70.6	102.0	143.8	167.3	188.2	232.7	269.3	298.0	318.9
110°	54.9	54.9	57.5	81.0	117.6	135.9	156.9	190.8	219.6	243.1	256.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	47.1	47.1	44.4	65.4	96.7	115.0	130.7	162.1	188.2	203.9	214.4
115°	36.6	36.6	36.6	49.7	78.4	94.1	109.8	138.6	164.7	180.4	188.2
117.5°	31.4	31.4	28.8	36.6	62.7	78.4	91.5	120.3	141.2	159.5	167.3
120°	23.5	23.5	23.5	23.5	47.1	62.7	75.8	102.0	122.9	138.6	146.4
122.5°	18.3	18.3	18.3	15.7	34.0	47.1	60.1	83.7	104.6	120.3	130.7
125°	15.7	13.1	13.1	13.1	20.9	31.4	44.4	65.4	83.7	102.0	112.4
127.5°	13.1	10.5	10.5	10.5	10.5	18.3	28.8	49.7	68.0	83.7	94.1
130°	10.5	7.8	7.8	7.8	5.2	10.5	18.3	34.0	52.3	65.4	75.8
132.5°	7.8	7.8	5.2	5.2	2.6	2.6	7.8	20.9	36.6	49.7	60.1
135°	5.2	5.2	5.2	2.6	2.6	0.0	0.0	10.5	23.5	34.0	44.4
137.5°	5.2	5.2	2.6	2.6	0.0	0.0	0.0	2.6	10.5	20.9	31.4
140°	5.2	2.6	2.6	2.6	0.0	0.0	0.0	0.0	2.6	10.5	18.3
142.5°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
145°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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°
0°	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3	3772.3
2.5°	3756.6	3759.2	3761.8	3761.8	3759.2	3759.2	3756.6	3751.4	3746.2	3743.5
5°	3738.3	3746.2	3751.4	3751.4	3751.4	3748.8	3748.8	3746.2	3740.9	3738.3
7.5°	3722.6	3735.7	3740.9	3738.3	3738.3	3738.3	3738.3	3740.9	3735.7	3733.1
10°	3706.9	3717.4	3727.9	3730.5	3733.1	3730.5	3730.5	3725.2	3722.6	3717.4
12.5°	3691.3	3709.6	3725.2	3738.3	3738.3	3738.3	3743.5	3751.4	3748.8	3740.9
15°	3678.2	3709.6	3727.9	3748.8	3756.6	3764.5	3767.1	3772.3	3764.5	3764.5
17.5°	3670.3	3712.2	3738.3	3759.2	3761.8	3772.3	3788.0	3795.8	3793.2	3790.6
20°	3657.3	3706.9	3743.5	3761.8	3774.9	3788.0	3808.9	3814.1	3819.4	3819.4
22.5°	3641.6	3696.5	3733.1	3774.9	3795.8	3808.9	3837.7	3853.3	3858.6	3856.0
25°	3628.5	3691.3	3746.2	3795.8	3816.7	3832.4	3869.0	3897.8	3903.0	3903.0
27.5°	3615.5	3688.6	3754.0	3819.4	3845.5	3863.8	3900.4	3929.2	3939.6	3942.2
30°	3602.4	3683.4	3761.8	3827.2	3858.6	3876.9	3918.7	3944.8	3965.8	3965.8
32.5°	3578.9	3678.2	3756.6	3827.2	3853.3	3884.7	3923.9	3952.7	3968.4	3965.8
35°	3555.3	3646.8	3735.7	3806.3	3835.0	3866.4	3913.5	3947.5	3957.9	3968.4
37.5°	3516.1	3612.8	3701.7	3772.3	3814.1	3840.3	3882.1	3908.2	3929.2	3923.9
40°	3463.8	3560.6	3652.0	3720.0	3756.6	3788.0	3835.0	3858.6	3876.9	3874.3
42.5°	3388.0	3497.8	3584.1	3657.3	3696.5	3727.9	3785.4	3806.3	3827.2	3829.8
45°	3312.2	3419.4	3516.1	3594.5	3631.1	3667.7	3738.3	3777.5	3803.7	3811.5
47.5°	3220.7	3341.0	3450.8	3557.9	3610.2	3657.3	3730.5	3785.4	3814.1	3819.4
50°	3144.9	3293.9	3429.8	3555.3	3620.7	3673.0	3772.3	3837.7	3869.0	3882.1
52.5°	3100.5	3280.8	3458.6	3620.7	3699.1	3764.5	3887.3	3960.5	4012.8	4018.0
55°	3108.3	3335.7	3557.9	3759.2	3837.7	3918.7	4031.1	4099.1	4143.5	4143.5
57.5°	3186.7	3458.6	3714.8	3900.4	3978.8	4041.6	4146.1	4190.6	4221.9	4229.8
60°	3327.9	3615.5	3837.7	3999.7	4052.0	4101.7	4159.2	4208.9	4221.9	4227.2
62.5°	3466.4	3712.2	3887.3	3999.7	4031.1	4072.9	4114.8	4143.5	4154.0	4154.0
65°	3539.6	3722.6	3829.8	3913.5	3947.5	3960.5	4005.0	4015.4	4039.0	4033.7
67.5°	3495.2	3612.8	3699.1	3769.7	3795.8	3822.0	3874.3	3900.4	3921.3	3926.5
70°	3343.6	3437.7	3529.2	3618.1	3652.0	3696.5	3759.2	3808.9	3832.4	3845.5
72.5°	3158.0	3270.4	3388.0	3495.2	3550.1	3591.9	3670.3	3735.7	3759.2	3772.3
75°	2967.1	3100.5	3236.4	3367.1	3424.6	3479.5	3573.6	3636.4	3678.2	3691.3
77.5°	2776.3	2938.4	3103.1	3252.1	3322.7	3380.2	3487.4	3555.3	3605.0	3610.2
80°	2598.5	2792.0	2975.0	3134.4	3205.0	3273.0	3380.2	3458.6	3484.7	3521.3
82.5°	2441.7	2643.0	2828.6	2995.9	3074.3	3134.4	3246.8	3327.9	3367.1	3388.0
85°	2271.7	2480.9	2669.1	2833.8	2914.8	2988.0	3092.6	3168.4	3223.3	3231.2
87.5°	2099.2	2308.3	2501.8	2671.7	2752.8	2820.7	2930.5	3003.7	3053.4	3069.1
90°	1916.2	2114.9	2300.5	2470.4	2538.4	2609.0	2713.5	2797.2	2849.5	2852.1
92.5°	1696.6	1887.5	2057.4	2216.8	2297.9	2350.2	2449.5	2535.8	2572.4	2588.1
95°	1416.9	1592.1	1754.1	1887.5	1968.5	2015.6	2112.3	2175.0	2216.8	2227.3
97.5°	1111.0	1247.0	1377.7	1495.3	1555.5	1594.7	1673.1	1728.0	1790.7	1775.0
100°	836.5	912.4	1006.5	1082.3	1126.7	1152.9	1210.4	1247.0	1283.6	1304.5
102.5°	606.5	664.0	705.8	745.0	776.4	802.6	847.0	860.1	870.5	896.7
105°	444.4	473.2	496.7	525.5	538.5	546.4	564.7	577.7	577.7	601.3
107.5°	334.6	347.7	358.1	373.8	373.8	381.7	381.7	384.3	392.1	386.9
110°	264.0	266.6	269.3	266.6	269.3	266.6	264.0	261.4	261.4	258.8



TEST NUMBER: P237897

CATALOG NUMBER: 8VT2-LD5-22-DR100-W-UNV-L840-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	219.6	217.0	214.4	206.5	203.9	198.7	196.1	190.8	185.6	185.6
115°	188.2	185.6	180.4	172.5	167.3	162.1	159.5	151.6	146.4	143.8
117.5°	167.3	164.7	159.5	151.6	149.0	143.8	138.6	130.7	125.5	122.9
120°	151.6	151.6	146.4	138.6	135.9	133.3	125.5	120.3	115.0	112.4
122.5°	135.9	135.9	133.3	128.1	125.5	122.9	117.6	112.4	107.2	107.2
125°	117.6	120.3	120.3	117.6	115.0	112.4	109.8	104.6	102.0	99.3
127.5°	102.0	104.6	107.2	107.2	104.6	104.6	99.3	96.7	94.1	94.1
130°	83.7	91.5	94.1	94.1	94.1	94.1	91.5	88.9	86.3	86.3
132.5°	68.0	73.2	78.4	81.0	81.0	81.0	78.4	78.4	75.8	75.8
135°	52.3	57.5	62.7	65.4	68.0	68.0	68.0	68.0	65.4	65.4
137.5°	39.2	44.4	49.7	52.3	52.3	54.9	54.9	54.9	52.3	52.3
140°	23.5	31.4	34.0	36.6	39.2	39.2	41.8	41.8	39.2	39.2
142.5°	13.1	18.3	20.9	23.5	26.1	26.1	28.8	26.1	26.1	26.1
145°	2.6	5.2	10.5	13.1	13.1	13.1	13.1	15.7	13.1	13.1
147.5°	0.0	0.0	0.0	0.0	0.0	2.6	2.6	2.6	2.6	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)