

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: CORELITE

Report Number: P#

Luminaire Tested: **44ID-180-L930-CFR2**

Issue Date: 9/24/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (13890049.01)
Test Lab: INNOVATION CENTER
Issue Date: 9/24/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: 44ID-180-L930-CFR2
Description: 18000 LUMEN 4X4 IN DEPTH LED LUMINAIRE, WITH RECESSED 2IN CUBE LENS
AND 3000K CCT, 90CRI LEDS
Light Source: -
Ballast/Driver:
Luminaire Equipment: Sample No. Condition Description

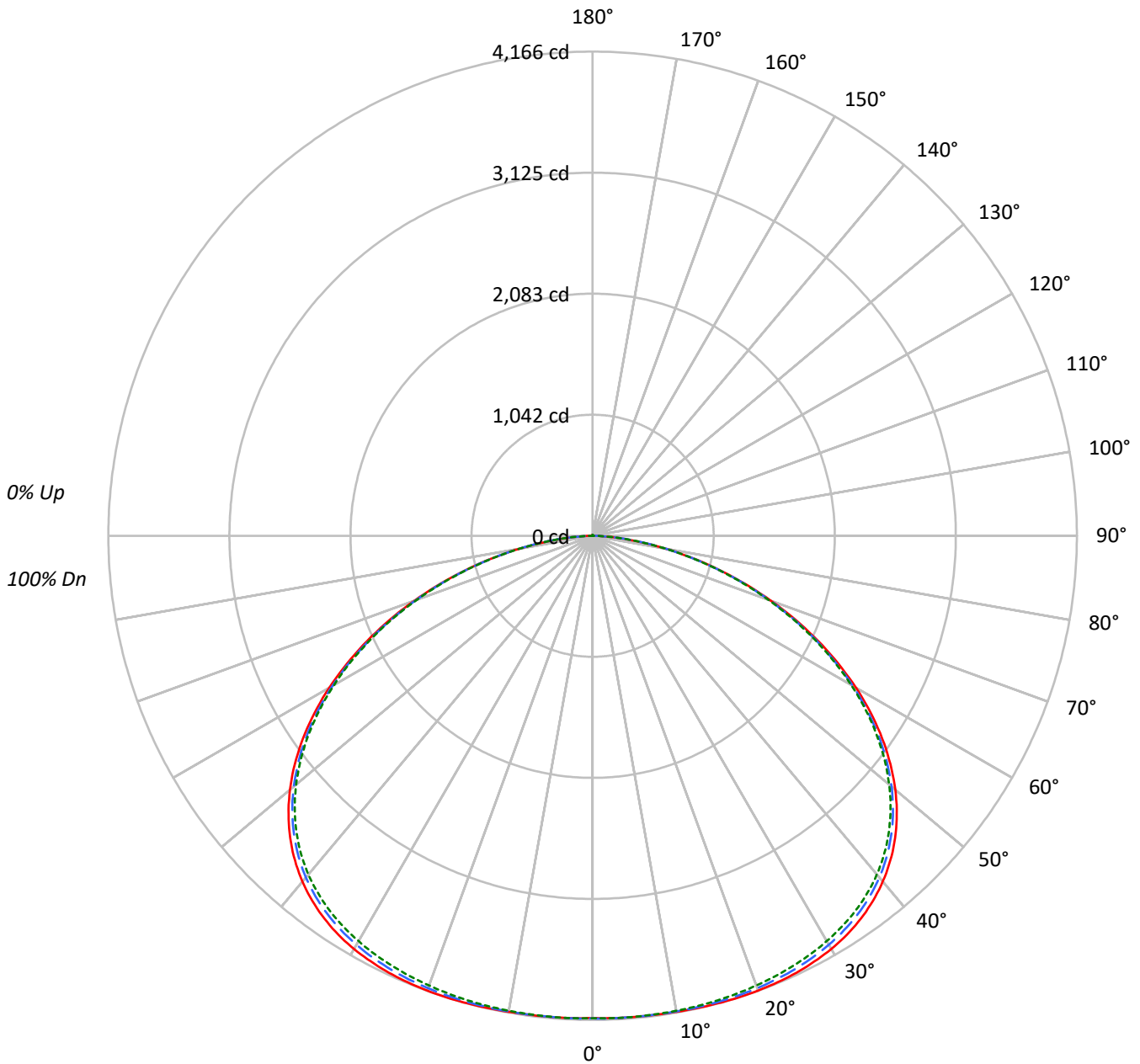
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15033.0 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.45 / 1.57
Luminous Opening: Rectangular (W 3.88' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 145.8
Input Voltage (V):
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

TEST NUMBER: P#
CATALOG NUMBER: 44ID-180-L930-CFR2

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | | | | | | | | | | | | | | | | | | | |
| 1 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 82 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | 80 | 76 | 71 | 77 | 73 | 70 | 68 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 63 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 52 | 64 | 57 | 51 | 62 | 55 | 50 | 60 | 54 | 49 | 47 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 61 | 51 | 44 | 72 | 59 | 51 | 44 | 57 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 40 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 54 | 45 | 38 | 66 | 53 | 44 | 38 | 51 | 43 | 38 | 50 | 43 | 37 | 48 | 42 | 37 | 35 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 49 | 40 | 33 | 61 | 48 | 39 | 33 | 46 | 39 | 33 | 45 | 38 | 33 | 43 | 37 | 32 | 30 | | | | | | | | | | | | | | | | | | | |
| 8 | 58 | 44 | 36 | 29 | 57 | 44 | 35 | 29 | 42 | 35 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 27 | | | | | | | | | | | | | | | | | | | |
| 9 | 54 | 41 | 32 | 26 | 53 | 40 | 32 | 26 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |
| 10 | 51 | 37 | 29 | 24 | 50 | 37 | 29 | 24 | 36 | 28 | 23 | 35 | 28 | 23 | 34 | 28 | 23 | 21 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2964 | 2964 | 2964 |
| 5° | 2978 | 2978 | 2977 |
| 10° | 3015 | 3013 | 3008 |
| 15° | 3078 | 3070 | 3059 |
| 20° | 3163 | 3146 | 3129 |
| 25° | 3267 | 3242 | 3216 |
| 30° | 3384 | 3350 | 3320 |
| 35° | 3505 | 3465 | 3434 |
| 40° | 3619 | 3576 | 3545 |
| 45° | 3714 | 3668 | 3637 |
| 50° | 3774 | 3728 | 3698 |
| 55° | 3786 | 3739 | 3712 |
| 60° | 3736 | 3690 | 3668 |
| 65° | 3614 | 3573 | 3556 |
| 70° | 3407 | 3371 | 3354 |
| 75° | 3086 | 3067 | 3053 |
| 80° | 2625 | 2634 | 2606 |
| 85° | 1956 | 2003 | 2000 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 396.7 | 2.6 |
| 10°-20° | 1176.7 | 7.8 |
| 20°-30° | 1902.2 | 12.7 |
| 30°-40° | 2491.5 | 16.6 |
| 40°-50° | 2802.5 | 18.6 |
| 50°-60° | 2681.7 | 17.8 |
| 60°-70° | 2091.5 | 13.9 |
| 70°-80° | 1178.7 | 7.8 |
| 80°-90° | 291.7 | 1.9 |
| 90°-100° | 1.0 | 0.0 |
| 100°-110° | 1.7 | 0.0 |
| 110°-120° | 3.0 | 0.0 |
| 120°-130° | 4.8 | 0.0 |
| 130°-140° | 3.8 | 0.0 |
| 140°-150° | 2.3 | 0.0 |
| 150°-160° | 1.7 | 0.0 |
| 160°-170° | 1.1 | 0.0 |
| 170°-180° | 0.4 | 0.0 |
| 0°-30° | 3475.6 | 23.1 |
| 0°-40° | 5967.1 | 39.7 |
| 0°-60° | 11451.3 | 76.2 |
| 0°-90° | 15013.1 | 99.9 |
| 90°-120° | 5.7 | 0.0 |
| 90°-150° | 16.6 | 0.1 |
| 90°-180° | 20.0 | 0.1 |
| 0°-180° | 15033.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 4152 | 4152 | 4152 | 4152 | 4152 | |
| 5° | 4156 | 4157 | 4156 | 4156 | 4155 | 397 |
| 15° | 4165 | 4164 | 4154 | 4145 | 4140 | 1180 |
| 25° | 4148 | 4140 | 4115 | 4092 | 4083 | 1917 |
| 35° | 4022 | 4009 | 3976 | 3951 | 3940 | 2518 |
| 45° | 3679 | 3663 | 3633 | 3616 | 3603 | 2834 |
| 55° | 3042 | 3026 | 3004 | 2991 | 2982 | 2711 |
| 65° | 2140 | 2132 | 2115 | 2109 | 2105 | 2112 |
| 75° | 1119 | 1119 | 1112 | 1110 | 1107 | 1186 |
| 85° | 239 | 242 | 244 | 246 | 244 | 277 |
| 90° | 2 | 2 | 2 | 2 | 2 | 11 |
| 95° | 1 | 1 | 1 | 1 | 1 | 1 |
| 105° | 2 | 2 | 2 | 2 | 2 | 2 |
| 115° | 3 | 3 | 3 | 3 | 3 | 3 |
| 125° | 6 | 6 | 6 | 6 | 6 | 5 |
| 135° | 5 | 5 | 5 | 5 | 5 | 4 |
| 145° | 4 | 4 | 4 | 3 | 4 | 2 |
| 155° | 4 | 4 | 4 | 4 | 4 | 2 |
| 165° | 4 | 4 | 4 | 4 | 4 | 1 |
| 175° | 5 | 5 | 5 | 5 | 5 | 0 |
| 180° | 4 | 4 | 4 | 4 | 4 | |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 4151.7 | 4151.7 | 4151.7 | 4151.7 | 4151.7 |
| 0.5° | 4150.7 | 4153.7 | 4154.7 | 4153.7 | 4151.7 |
| 1° | 4151.7 | 4153.7 | 4154.7 | 4154.7 | 4152.7 |
| 1.5° | 4152.7 | 4154.7 | 4154.7 | 4154.7 | 4153.7 |
| 2° | 4152.7 | 4154.7 | 4154.7 | 4155.7 | 4153.7 |
| 2.5° | 4153.7 | 4155.7 | 4155.7 | 4155.7 | 4153.7 |
| 3° | 4154.7 | 4155.7 | 4155.7 | 4155.7 | 4154.7 |
| 3.5° | 4154.7 | 4155.7 | 4155.7 | 4155.7 | 4154.7 |
| 4° | 4155.7 | 4155.7 | 4155.7 | 4155.7 | 4154.7 |
| 4.5° | 4155.7 | 4156.7 | 4155.7 | 4155.7 | 4154.7 |
| 5° | 4155.7 | 4156.7 | 4155.7 | 4155.7 | 4154.7 |
| 5.5° | 4155.7 | 4156.7 | 4155.7 | 4155.7 | 4154.7 |
| 6° | 4156.7 | 4156.7 | 4155.7 | 4155.7 | 4153.7 |
| 6.5° | 4156.7 | 4157.8 | 4156.7 | 4155.7 | 4153.7 |
| 7° | 4156.7 | 4157.8 | 4155.7 | 4155.7 | 4153.7 |
| 7.5° | 4156.7 | 4157.8 | 4155.7 | 4154.7 | 4152.7 |
| 8° | 4157.8 | 4157.8 | 4156.7 | 4154.7 | 4152.7 |
| 8.5° | 4157.8 | 4158.8 | 4155.7 | 4154.7 | 4151.7 |
| 9° | 4158.8 | 4158.8 | 4156.7 | 4153.7 | 4151.7 |
| 9.5° | 4158.8 | 4159.8 | 4155.7 | 4153.7 | 4150.7 |
| 10° | 4159.8 | 4159.8 | 4155.7 | 4152.7 | 4149.7 |
| 10.5° | 4160.8 | 4160.8 | 4155.7 | 4152.7 | 4149.7 |
| 11° | 4160.8 | 4160.8 | 4155.7 | 4151.7 | 4148.6 |
| 11.5° | 4161.8 | 4161.8 | 4155.7 | 4150.7 | 4147.6 |
| 12° | 4161.8 | 4161.8 | 4155.7 | 4150.7 | 4146.6 |
| 12.5° | 4162.8 | 4161.8 | 4154.7 | 4149.7 | 4145.6 |
| 13° | 4162.8 | 4161.8 | 4154.7 | 4148.6 | 4144.6 |
| 13.5° | 4163.8 | 4162.8 | 4154.7 | 4147.6 | 4143.6 |
| 14° | 4163.8 | 4162.8 | 4154.7 | 4146.6 | 4141.6 |
| 14.5° | 4164.8 | 4162.8 | 4153.7 | 4145.6 | 4140.5 |
| 15° | 4164.8 | 4163.8 | 4153.7 | 4144.6 | 4139.5 |
| 15.5° | 4165.9 | 4163.8 | 4152.7 | 4142.6 | 4137.5 |
| 16° | 4164.8 | 4163.8 | 4151.7 | 4141.6 | 4135.5 |
| 16.5° | 4165.9 | 4163.8 | 4151.7 | 4139.5 | 4133.5 |
| 17° | 4165.9 | 4162.8 | 4150.7 | 4137.5 | 4132.4 |
| 17.5° | 4165.9 | 4162.8 | 4148.6 | 4136.5 | 4130.4 |
| 18° | 4165.9 | 4162.8 | 4147.6 | 4134.5 | 4127.4 |
| 18.5° | 4165.9 | 4161.8 | 4146.6 | 4132.4 | 4125.4 |
| 19° | 4164.8 | 4161.8 | 4145.6 | 4130.4 | 4123.3 |
| 19.5° | 4164.8 | 4160.8 | 4143.6 | 4127.4 | 4120.3 |
| 20° | 4163.8 | 4159.8 | 4141.6 | 4125.4 | 4118.3 |
| 20.5° | 4162.8 | 4158.8 | 4140.5 | 4123.3 | 4115.2 |
| 21° | 4162.8 | 4157.8 | 4138.5 | 4120.3 | 4112.2 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 22.5° | 4158.8 | 4152.7 | 4131.4 | 4111.2 | 4102.1 |
| 23° | 4156.7 | 4150.7 | 4128.4 | 4108.1 | 4099.0 |
| 23.5° | 4154.7 | 4148.6 | 4125.4 | 4104.1 | 4095.0 |
| 24° | 4152.7 | 4146.6 | 4122.3 | 4100.0 | 4090.9 |
| 24.5° | 4150.7 | 4143.6 | 4119.3 | 4096.0 | 4086.9 |
| 25° | 4147.6 | 4140.5 | 4115.2 | 4091.9 | 4082.8 |
| 25.5° | 4144.6 | 4137.5 | 4111.2 | 4087.9 | 4077.8 |
| 26° | 4141.6 | 4134.5 | 4107.1 | 4083.8 | 4073.7 |
| 26.5° | 4138.5 | 4130.4 | 4103.1 | 4078.8 | 4068.6 |
| 27° | 4134.5 | 4126.4 | 4098.0 | 4073.7 | 4063.6 |
| 27.5° | 4130.4 | 4122.3 | 4092.9 | 4068.6 | 4058.5 |
| 28° | 4126.4 | 4117.2 | 4087.9 | 4063.6 | 4053.5 |
| 28.5° | 4121.3 | 4112.2 | 4082.8 | 4057.5 | 4047.4 |
| 29° | 4116.2 | 4107.1 | 4076.7 | 4051.4 | 4041.3 |
| 29.5° | 4111.2 | 4101.0 | 4070.7 | 4045.4 | 4034.2 |
| 30° | 4105.1 | 4095.0 | 4063.6 | 4038.3 | 4027.1 |
| 30.5° | 4099.0 | 4088.9 | 4056.5 | 4031.2 | 4021.1 |
| 31° | 4091.9 | 4081.8 | 4049.4 | 4024.1 | 4013.0 |
| 31.5° | 4085.9 | 4074.7 | 4041.3 | 4017.0 | 4005.9 |
| 32° | 4077.8 | 4066.6 | 4034.2 | 4008.9 | 3997.8 |
| 32.5° | 4069.7 | 4058.5 | 4025.1 | 3999.8 | 3988.6 |
| 33° | 4061.6 | 4049.4 | 4016.0 | 3991.7 | 3979.5 |
| 33.5° | 4052.4 | 4040.3 | 4006.9 | 3982.6 | 3970.4 |
| 34° | 4042.3 | 4030.2 | 3996.7 | 3972.4 | 3961.3 |
| 34.5° | 4032.2 | 4020.0 | 3986.6 | 3962.3 | 3951.2 |
| 35° | 4022.1 | 4008.9 | 3975.5 | 3951.2 | 3940.0 |
| 35.5° | 4010.9 | 3997.8 | 3964.3 | 3940.0 | 3928.9 |
| 36° | 3999.8 | 3985.6 | 3952.2 | 3928.9 | 3916.8 |
| 36.5° | 3986.6 | 3973.5 | 3940.0 | 3916.8 | 3905.6 |
| 37° | 3973.5 | 3960.3 | 3926.9 | 3903.6 | 3892.5 |
| 37.5° | 3960.3 | 3946.1 | 3913.7 | 3890.4 | 3878.3 |
| 38° | 3946.1 | 3933.0 | 3899.5 | 3877.3 | 3865.1 |
| 38.5° | 3931.9 | 3917.8 | 3884.4 | 3862.1 | 3850.9 |
| 39° | 3916.8 | 3901.6 | 3869.2 | 3847.9 | 3835.7 |
| 39.5° | 3900.6 | 3885.4 | 3854.0 | 3831.7 | 3820.6 |
| 40° | 3883.3 | 3869.2 | 3836.8 | 3815.5 | 3804.4 |
| 40.5° | 3867.1 | 3851.9 | 3819.5 | 3799.3 | 3787.1 |
| 41° | 3848.9 | 3833.7 | 3802.3 | 3781.1 | 3768.9 |
| 41.5° | 3829.7 | 3814.5 | 3783.1 | 3762.8 | 3750.7 |
| 42° | 3810.4 | 3795.2 | 3763.9 | 3744.6 | 3731.4 |
| 42.5° | 3790.2 | 3775.0 | 3743.6 | 3724.4 | 3712.2 |
| 43° | 3769.9 | 3753.7 | 3723.3 | 3704.1 | 3692.0 |
| 43.5° | 3748.7 | 3732.5 | 3702.1 | 3682.8 | 3670.7 |



TEST NUMBER: P#

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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 45° | 3678.8 | 3662.6 | 3633.2 | 3616.0 | 3602.8 |
| 45.5° | 3654.5 | 3637.3 | 3608.9 | 3591.7 | 3579.6 |
| 46° | 3629.2 | 3612.0 | 3583.6 | 3566.4 | 3554.2 |
| 46.5° | 3602.8 | 3585.6 | 3558.3 | 3541.1 | 3528.9 |
| 47° | 3575.5 | 3559.3 | 3531.0 | 3515.8 | 3502.6 |
| 47.5° | 3548.2 | 3531.0 | 3503.6 | 3488.4 | 3475.3 |
| 48° | 3520.8 | 3502.6 | 3476.3 | 3460.1 | 3446.9 |
| 48.5° | 3491.5 | 3474.2 | 3447.9 | 3432.7 | 3420.6 |
| 49° | 3460.1 | 3443.9 | 3417.5 | 3401.3 | 3390.2 |
| 49.5° | 3429.7 | 3413.5 | 3387.2 | 3372.0 | 3359.8 |
| 50° | 3398.3 | 3381.1 | 3356.8 | 3341.6 | 3329.4 |
| 50.5° | 3365.9 | 3348.7 | 3324.4 | 3309.2 | 3298.1 |
| 51° | 3333.5 | 3316.3 | 3292.0 | 3276.8 | 3264.6 |
| 51.5° | 3299.1 | 3281.9 | 3257.5 | 3243.4 | 3232.2 |
| 52° | 3264.6 | 3247.4 | 3223.1 | 3210.0 | 3198.8 |
| 52.5° | 3230.2 | 3213.0 | 3188.7 | 3174.5 | 3164.4 |
| 53° | 3192.7 | 3176.5 | 3154.3 | 3141.1 | 3130.0 |
| 53.5° | 3155.3 | 3139.1 | 3116.8 | 3103.6 | 3093.5 |
| 54° | 3117.8 | 3101.6 | 3079.3 | 3066.2 | 3057.1 |
| 54.5° | 3081.4 | 3064.1 | 3042.9 | 3029.7 | 3020.6 |
| 55° | 3041.9 | 3025.7 | 3004.4 | 2991.2 | 2982.1 |
| 55.5° | 3002.4 | 2986.2 | 2964.9 | 2951.7 | 2943.6 |
| 56° | 2960.9 | 2945.7 | 2924.4 | 2913.3 | 2905.2 |
| 56.5° | 2919.3 | 2905.2 | 2883.9 | 2872.8 | 2864.7 |
| 57° | 2878.8 | 2863.6 | 2843.4 | 2833.3 | 2825.2 |
| 57.5° | 2838.3 | 2822.1 | 2801.9 | 2791.8 | 2783.6 |
| 58° | 2793.8 | 2778.6 | 2759.3 | 2749.2 | 2742.1 |
| 58.5° | 2750.2 | 2736.1 | 2715.8 | 2706.7 | 2699.6 |
| 59° | 2706.7 | 2692.5 | 2673.3 | 2664.2 | 2657.1 |
| 59.5° | 2661.1 | 2648.0 | 2628.7 | 2619.6 | 2612.5 |
| 60° | 2616.6 | 2602.4 | 2584.2 | 2576.1 | 2569.0 |
| 60.5° | 2571.0 | 2558.9 | 2539.6 | 2531.5 | 2524.4 |
| 61° | 2524.4 | 2512.3 | 2494.0 | 2485.9 | 2478.9 |
| 61.5° | 2476.8 | 2466.7 | 2448.5 | 2440.4 | 2434.3 |
| 62° | 2430.3 | 2420.1 | 2401.9 | 2394.8 | 2388.7 |
| 62.5° | 2382.7 | 2372.5 | 2354.3 | 2347.2 | 2341.1 |
| 63° | 2335.1 | 2324.9 | 2307.7 | 2300.6 | 2294.6 |
| 63.5° | 2286.5 | 2276.3 | 2260.1 | 2253.0 | 2247.0 |
| 64° | 2237.9 | 2227.7 | 2210.5 | 2205.5 | 2198.4 |
| 64.5° | 2189.3 | 2179.1 | 2161.9 | 2156.8 | 2150.8 |
| 65° | 2139.6 | 2131.5 | 2115.3 | 2109.3 | 2105.2 |
| 65.5° | 2091.0 | 2080.9 | 2065.7 | 2060.6 | 2054.6 |
| 66° | 2039.4 | 2031.3 | 2016.1 | 2011.0 | 2007.0 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 67.5° | 1889.5 | 1880.4 | 1867.2 | 1862.2 | 1857.1 |
| 68° | 1837.9 | 1829.8 | 1816.6 | 1812.6 | 1807.5 |
| 68.5° | 1786.2 | 1778.1 | 1765.0 | 1761.9 | 1758.9 |
| 69° | 1734.6 | 1726.5 | 1715.4 | 1712.3 | 1708.3 |
| 69.5° | 1684.0 | 1675.9 | 1665.7 | 1662.7 | 1657.6 |
| 70° | 1632.3 | 1625.2 | 1615.1 | 1612.1 | 1607.0 |
| 70.5° | 1580.7 | 1573.6 | 1564.5 | 1561.4 | 1556.4 |
| 71° | 1529.0 | 1523.0 | 1514.9 | 1510.8 | 1505.7 |
| 71.5° | 1478.4 | 1472.3 | 1463.2 | 1460.2 | 1456.1 |
| 72° | 1426.8 | 1421.7 | 1412.6 | 1410.6 | 1405.5 |
| 72.5° | 1375.1 | 1371.1 | 1362.0 | 1359.9 | 1355.9 |
| 73° | 1323.5 | 1319.4 | 1310.3 | 1308.3 | 1305.2 |
| 73.5° | 1272.8 | 1268.8 | 1260.7 | 1257.7 | 1254.6 |
| 74° | 1222.2 | 1219.2 | 1211.1 | 1209.0 | 1205.0 |
| 74.5° | 1170.6 | 1168.5 | 1161.5 | 1158.4 | 1155.4 |
| 75° | 1118.9 | 1118.9 | 1111.8 | 1109.8 | 1106.8 |
| 75.5° | 1069.3 | 1069.3 | 1062.2 | 1060.2 | 1057.2 |
| 76° | 1019.7 | 1019.7 | 1012.6 | 1010.7 | 1006.6 |
| 76.5° | 969.6 | 970.0 | 964.0 | 961.9 | 958.5 |
| 77° | 921.6 | 922.0 | 916.6 | 913.9 | 910.5 |
| 77.5° | 870.2 | 872.7 | 868.2 | 865.8 | 862.4 |
| 78° | 822.3 | 825.4 | 820.8 | 818.9 | 816.1 |
| 78.5° | 777.2 | 779.1 | 776.2 | 773.8 | 769.9 |
| 79° | 729.9 | 731.4 | 729.5 | 727.5 | 723.6 |
| 79.5° | 683.3 | 685.8 | 684.5 | 682.7 | 678.2 |
| 80° | 638.6 | 640.5 | 640.8 | 638.0 | 633.9 |
| 80.5° | 591.7 | 595.4 | 596.0 | 593.3 | 591.2 |
| 81° | 548.2 | 551.8 | 552.8 | 551.2 | 548.3 |
| 81.5° | 505.5 | 509.6 | 510.6 | 509.6 | 506.0 |
| 82° | 462.7 | 467.7 | 469.2 | 468.5 | 464.5 |
| 82.5° | 421.7 | 427.4 | 429.0 | 428.4 | 424.7 |
| 83° | 382.1 | 388.2 | 389.8 | 390.3 | 386.8 |
| 83.5° | 343.7 | 349.6 | 351.5 | 352.1 | 348.3 |
| 84° | 306.8 | 312.1 | 314.5 | 315.5 | 312.4 |
| 84.5° | 271.8 | 276.0 | 279.0 | 280.3 | 278.8 |
| 85° | 238.8 | 241.8 | 244.5 | 246.4 | 244.2 |
| 85.5° | 206.8 | 209.2 | 211.2 | 214.1 | 212.3 |
| 86° | 177.0 | 179.4 | 180.9 | 183.1 | 183.1 |
| 86.5° | 148.7 | 149.8 | 150.9 | 153.5 | 153.5 |
| 87° | 121.5 | 121.6 | 122.0 | 125.4 | 125.5 |
| 87.5° | 93.8 | 94.6 | 95.0 | 97.9 | 98.9 |
| 88° | 66.1 | 68.5 | 69.1 | 71.8 | 71.6 |
| 88.5° | 46.8 | 46.8 | 46.7 | 49.4 | 50.0 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 90° | 2.2 | 2.1 | 2.2 | 2.3 | 2.1 |
| 90.5° | 0.7 | 0.6 | 0.7 | 0.8 | 0.7 |
| 91° | 0.7 | 0.6 | 0.6 | 0.7 | 0.6 |
| 91.5° | 0.9 | 0.7 | 0.8 | 0.6 | 0.5 |
| 92° | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 |
| 92.5° | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 |
| 93° | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 |
| 93.5° | 0.9 | 0.7 | 0.8 | 0.8 | 0.9 |
| 94° | 0.9 | 0.8 | 0.9 | 0.8 | 1.0 |
| 94.5° | 0.9 | 0.9 | 0.8 | 0.9 | 0.9 |
| 95° | 0.9 | 0.7 | 0.9 | 0.8 | 1.0 |
| 95.5° | 0.8 | 0.9 | 1.0 | 0.9 | 1.0 |
| 96° | 1.1 | 1.1 | 0.9 | 0.9 | 1.0 |
| 96.5° | 1.1 | 1.0 | 1.0 | 0.9 | 1.0 |
| 97° | 1.1 | 1.0 | 1.1 | 0.9 | 1.2 |
| 97.5° | 1.2 | 1.0 | 1.0 | 0.9 | 1.2 |
| 98° | 1.3 | 1.1 | 1.1 | 1.1 | 1.3 |
| 98.5° | 1.3 | 1.1 | 1.0 | 1.0 | 1.2 |
| 99° | 1.2 | 1.2 | 1.1 | 1.0 | 1.1 |
| 99.5° | 1.3 | 1.0 | 1.2 | 1.1 | 1.1 |
| 100° | 1.3 | 1.2 | 1.2 | 1.2 | 1.3 |
| 100.5° | 1.3 | 1.3 | 1.2 | 1.3 | 1.3 |
| 101° | 1.4 | 1.2 | 1.2 | 1.2 | 1.2 |
| 101.5° | 1.5 | 1.2 | 1.3 | 1.3 | 1.4 |
| 102° | 1.6 | 1.3 | 1.4 | 1.3 | 1.4 |
| 102.5° | 1.4 | 1.3 | 1.3 | 1.4 | 1.4 |
| 103° | 1.4 | 1.2 | 1.4 | 1.3 | 1.4 |
| 103.5° | 1.5 | 1.5 | 1.4 | 1.4 | 1.3 |
| 104° | 1.7 | 1.5 | 1.5 | 1.4 | 1.3 |
| 104.5° | 1.5 | 1.6 | 1.6 | 1.6 | 1.4 |
| 105° | 1.8 | 1.6 | 1.5 | 1.7 | 1.7 |
| 105.5° | 1.7 | 1.4 | 1.6 | 1.5 | 1.5 |
| 106° | 1.6 | 1.6 | 1.7 | 1.7 | 1.8 |
| 106.5° | 1.8 | 1.6 | 1.7 | 1.6 | 1.5 |
| 107° | 1.7 | 1.7 | 1.8 | 1.8 | 1.6 |
| 107.5° | 1.9 | 1.7 | 1.8 | 1.9 | 1.8 |
| 108° | 1.9 | 1.7 | 1.6 | 1.9 | 1.7 |
| 108.5° | 1.9 | 1.9 | 1.9 | 1.8 | 1.7 |
| 109° | 2.0 | 1.9 | 1.9 | 1.9 | 2.0 |
| 109.5° | 2.1 | 1.8 | 2.1 | 2.0 | 1.8 |
| 110° | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 |
| 110.5° | 2.1 | 2.0 | 2.1 | 2.1 | 2.2 |
| 111° | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 2.4 | 2.5 | 2.6 | 2.5 | 2.3 |
| 113° | 2.7 | 2.4 | 2.4 | 2.5 | 2.5 |
| 113.5° | 2.7 | 2.7 | 2.7 | 2.8 | 2.8 |
| 114° | 2.8 | 2.8 | 2.9 | 2.9 | 2.8 |
| 114.5° | 3.0 | 3.0 | 2.9 | 2.9 | 2.7 |
| 115° | 3.0 | 3.0 | 2.9 | 3.0 | 2.9 |
| 115.5° | 3.3 | 3.0 | 3.2 | 3.1 | 2.9 |
| 116° | 3.2 | 3.3 | 3.3 | 3.2 | 3.1 |
| 116.5° | 3.4 | 3.4 | 3.4 | 3.4 | 3.3 |
| 117° | 3.6 | 3.6 | 3.6 | 3.6 | 3.2 |
| 117.5° | 3.8 | 3.6 | 3.7 | 3.6 | 3.4 |
| 118° | 3.8 | 3.7 | 3.9 | 3.7 | 3.5 |
| 118.5° | 4.2 | 3.9 | 3.9 | 3.8 | 3.7 |
| 119° | 4.2 | 4.2 | 4.3 | 3.9 | 3.9 |
| 119.5° | 4.3 | 4.3 | 4.3 | 4.2 | 4.1 |
| 120° | 4.5 | 4.5 | 4.4 | 4.3 | 4.4 |
| 120.5° | 4.6 | 4.4 | 4.6 | 4.5 | 4.4 |
| 121° | 4.6 | 4.6 | 4.6 | 4.6 | 4.4 |
| 121.5° | 5.1 | 4.9 | 4.8 | 4.6 | 4.6 |
| 122° | 4.8 | 5.1 | 4.9 | 4.8 | 4.9 |
| 122.5° | 5.2 | 5.1 | 5.0 | 5.0 | 4.8 |
| 123° | 5.3 | 5.3 | 5.1 | 5.1 | 5.0 |
| 123.5° | 5.3 | 5.5 | 5.2 | 5.0 | 5.2 |
| 124° | 5.4 | 5.5 | 5.4 | 5.2 | 5.2 |
| 124.5° | 5.7 | 5.5 | 5.4 | 5.3 | 5.3 |
| 125° | 5.9 | 5.7 | 5.6 | 5.5 | 5.5 |
| 125.5° | 5.9 | 5.8 | 5.6 | 5.5 | 5.6 |
| 126° | 5.9 | 5.7 | 5.6 | 5.6 | 5.5 |
| 126.5° | 5.7 | 5.8 | 5.9 | 5.6 | 5.7 |
| 127° | 5.9 | 5.9 | 5.7 | 5.6 | 5.5 |
| 127.5° | 6.1 | 6.0 | 5.9 | 5.6 | 5.5 |
| 128° | 6.1 | 5.8 | 5.8 | 5.6 | 5.7 |
| 128.5° | 5.9 | 5.9 | 5.7 | 5.5 | 5.7 |
| 129° | 5.8 | 5.8 | 5.7 | 5.6 | 5.5 |
| 129.5° | 5.7 | 5.8 | 5.7 | 5.6 | 5.6 |
| 130° | 5.7 | 5.8 | 5.6 | 5.4 | 5.5 |
| 130.5° | 5.9 | 5.7 | 5.7 | 5.2 | 5.5 |
| 131° | 5.6 | 5.6 | 5.6 | 5.3 | 5.4 |
| 131.5° | 5.7 | 5.5 | 5.3 | 5.2 | 5.3 |
| 132° | 5.6 | 5.4 | 5.4 | 5.2 | 5.2 |
| 132.5° | 5.6 | 5.4 | 5.3 | 5.2 | 5.3 |
| 133° | 5.4 | 5.2 | 5.2 | 4.9 | 5.1 |
| 133.5° | 5.5 | 5.2 | 5.0 | 4.8 | 5.1 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 135° | 5.3 | 5.0 | 4.8 | 4.7 | 5.1 |
| 135.5° | 5.0 | 5.1 | 4.8 | 4.6 | 4.9 |
| 136° | 4.9 | 4.8 | 4.6 | 4.4 | 4.9 |
| 136.5° | 5.0 | 4.8 | 4.6 | 4.4 | 4.8 |
| 137° | 4.9 | 4.7 | 4.6 | 4.4 | 4.7 |
| 137.5° | 4.8 | 4.6 | 4.5 | 4.2 | 4.5 |
| 138° | 4.7 | 4.5 | 4.3 | 4.2 | 4.5 |
| 138.5° | 4.8 | 4.5 | 4.4 | 4.1 | 4.4 |
| 139° | 4.2 | 4.4 | 4.3 | 3.8 | 4.5 |
| 139.5° | 4.5 | 4.2 | 4.1 | 3.9 | 4.4 |
| 140° | 4.4 | 4.1 | 4.2 | 3.8 | 4.1 |
| 140.5° | 4.4 | 4.1 | 4.1 | 3.8 | 4.1 |
| 141° | 4.2 | 4.1 | 3.9 | 3.6 | 3.8 |
| 141.5° | 3.8 | 4.1 | 4.1 | 3.6 | 3.8 |
| 142° | 3.7 | 3.7 | 3.9 | 3.7 | 3.5 |
| 142.5° | 3.7 | 3.9 | 3.8 | 3.6 | 3.5 |
| 143° | 3.9 | 3.8 | 3.8 | 3.7 | 3.5 |
| 143.5° | 3.9 | 3.8 | 3.8 | 3.5 | 3.5 |
| 144° | 3.9 | 3.6 | 3.9 | 3.4 | 3.6 |
| 144.5° | 3.7 | 3.6 | 3.7 | 3.5 | 3.6 |
| 145° | 3.8 | 3.6 | 3.7 | 3.3 | 3.6 |
| 145.5° | 3.7 | 3.5 | 3.6 | 3.3 | 3.8 |
| 146° | 3.7 | 3.5 | 3.4 | 3.3 | 3.6 |
| 146.5° | 3.8 | 3.5 | 3.4 | 3.3 | 3.6 |
| 147° | 3.7 | 3.5 | 3.3 | 3.4 | 3.4 |
| 147.5° | 3.6 | 3.5 | 3.3 | 3.4 | 3.7 |
| 148° | 3.7 | 3.5 | 3.4 | 3.3 | 3.7 |
| 148.5° | 3.8 | 3.6 | 3.4 | 3.3 | 3.7 |
| 149° | 3.7 | 3.5 | 3.4 | 3.3 | 3.7 |
| 149.5° | 3.9 | 3.4 | 3.4 | 3.3 | 3.8 |
| 150° | 3.8 | 3.6 | 3.4 | 3.3 | 3.7 |
| 150.5° | 3.7 | 3.5 | 3.4 | 3.4 | 3.7 |
| 151° | 3.9 | 3.5 | 3.3 | 3.4 | 3.9 |
| 151.5° | 3.8 | 3.6 | 3.3 | 3.4 | 3.9 |
| 152° | 3.9 | 3.6 | 3.5 | 3.6 | 3.7 |
| 152.5° | 3.9 | 3.7 | 3.4 | 3.5 | 3.9 |
| 153° | 3.8 | 3.6 | 3.5 | 3.7 | 4.1 |
| 153.5° | 4.2 | 3.7 | 3.4 | 3.6 | 3.9 |
| 154° | 3.9 | 3.7 | 3.6 | 3.6 | 3.9 |
| 154.5° | 3.9 | 3.6 | 3.6 | 3.8 | 4.1 |
| 155° | 3.7 | 3.7 | 3.7 | 3.8 | 4.2 |
| 155.5° | 3.9 | 3.6 | 3.6 | 3.7 | 4.1 |
| 156° | 3.7 | 3.7 | 3.7 | 3.7 | 4.1 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 157.5° | 3.7 | 3.5 | 3.6 | 3.8 | 3.9 |
| 158° | 4.1 | 3.7 | 3.6 | 3.7 | 4.1 |
| 158.5° | 3.8 | 3.7 | 3.5 | 3.7 | 3.9 |
| 159° | 3.9 | 3.7 | 3.6 | 3.7 | 4.2 |
| 159.5° | 3.8 | 3.6 | 3.6 | 3.7 | 4.3 |
| 160° | 3.8 | 3.7 | 3.5 | 3.7 | 4.1 |
| 160.5° | 3.7 | 3.6 | 3.6 | 3.8 | 4.1 |
| 161° | 3.7 | 3.6 | 3.6 | 3.8 | 4.1 |
| 161.5° | 3.8 | 3.7 | 3.6 | 3.6 | 3.8 |
| 162° | 3.7 | 3.6 | 3.7 | 3.8 | 3.8 |
| 162.5° | 3.9 | 3.8 | 3.7 | 3.7 | 3.9 |
| 163° | 3.9 | 3.7 | 3.8 | 3.8 | 3.8 |
| 163.5° | 3.8 | 3.7 | 3.8 | 3.8 | 4.2 |
| 164° | 3.7 | 3.8 | 3.7 | 4.1 | 4.1 |
| 164.5° | 3.6 | 3.9 | 3.8 | 4.1 | 4.2 |
| 165° | 3.7 | 3.7 | 3.6 | 3.9 | 4.1 |
| 165.5° | 3.5 | 3.7 | 3.6 | 4.3 | 4.1 |
| 166° | 3.8 | 3.8 | 3.7 | 4.1 | 3.9 |
| 166.5° | 3.8 | 3.7 | 3.6 | 4.2 | 3.7 |
| 167° | 3.7 | 4.1 | 3.7 | 4.3 | 4.2 |
| 167.5° | 3.8 | 4.1 | 3.8 | 4.4 | 4.2 |
| 168° | 3.9 | 3.9 | 3.7 | 4.3 | 4.1 |
| 168.5° | 3.8 | 4.2 | 3.9 | 4.6 | 4.2 |
| 169° | 4.2 | 4.1 | 3.7 | 4.6 | 4.2 |
| 169.5° | 4.1 | 4.1 | 3.8 | 4.5 | 4.3 |
| 170° | 4.2 | 4.1 | 3.9 | 4.6 | 4.2 |
| 170.5° | 4.2 | 4.3 | 3.9 | 4.6 | 4.4 |
| 171° | 4.2 | 4.2 | 4.2 | 4.6 | 4.5 |
| 171.5° | 4.1 | 4.2 | 4.2 | 4.7 | 4.3 |
| 172° | 4.1 | 4.2 | 4.3 | 4.7 | 4.4 |
| 172.5° | 4.3 | 4.3 | 4.4 | 4.7 | 4.4 |
| 173° | 4.1 | 4.1 | 4.4 | 4.7 | 4.5 |
| 173.5° | 4.4 | 4.3 | 4.5 | 4.6 | 4.6 |
| 174° | 4.5 | 4.5 | 4.8 | 4.7 | 4.5 |
| 174.5° | 4.5 | 4.7 | 4.7 | 4.9 | 4.7 |
| 175° | 4.8 | 4.7 | 4.8 | 4.9 | 4.6 |
| 175.5° | 4.8 | 4.7 | 5.0 | 4.8 | 4.8 |
| 176° | 5.0 | 4.9 | 4.8 | 4.7 | 4.7 |
| 176.5° | 5.1 | 4.8 | 4.9 | 4.5 | 4.7 |
| 177° | 4.9 | 4.8 | 4.6 | 4.5 | 4.7 |
| 177.5° | 5.0 | 4.8 | 4.5 | 4.4 | 4.8 |
| 178° | 4.7 | 4.6 | 4.4 | 4.4 | 4.5 |
| 178.5° | 4.6 | 4.5 | 4.3 | 4.3 | 4.3 |



TEST NUMBER: P#

CATALOG NUMBER: 44ID-180-L930-CFR2

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|------|-----|-------|-----|-------|-----|
| 180° | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







| | | | | | |
|-------|--------|--------|--------|--------|--------|
| 21.5° | 4161.8 | 4156.7 | 4136.5 | 4117.2 | 4109.1 |
| 22° | 4159.8 | 4154.7 | 4133.5 | 4114.2 | 4106.1 |



| | | | | | |
|-------|--------|--------|--------|--------|--------|
| 44° | 3725.4 | 3710.2 | 3679.8 | 3661.6 | 3649.4 |
| 44.5° | 3702.1 | 3685.9 | 3657.5 | 3638.3 | 3626.1 |



| | | | | | |
|-------|--------|--------|--------|--------|--------|
| 66.5° | 1989.8 | 1981.7 | 1966.5 | 1961.4 | 1956.4 |
| 67° | 1940.2 | 1931.0 | 1916.9 | 1911.8 | 1907.7 |



| | | | | | |
|-------|------|------|------|------|------|
| 89° | 29.6 | 29.1 | 28.8 | 30.3 | 30.7 |
| 89.5° | 13.1 | 13.3 | 13.0 | 13.9 | 13.7 |



| | | | | | |
|--------|-----|-----|-----|-----|-----|
| 111.5° | 2.5 | 2.2 | 2.3 | 2.3 | 2.2 |
| 112° | 2.5 | 2.3 | 2.3 | 2.3 | 2.5 |



| | | | | | |
|--------|-----|-----|-----|-----|-----|
| 134° | 5.2 | 5.1 | 5.0 | 4.9 | 5.2 |
| 134.5° | 5.3 | 5.0 | 5.0 | 4.7 | 4.9 |



| | | | | | |
|--------|-----|-----|-----|-----|-----|
| 156.5° | 3.9 | 3.6 | 3.7 | 3.8 | 3.9 |
| 157° | 3.8 | 3.6 | 3.7 | 3.7 | 3.9 |



| | | | | | |
|--------|-----|-----|-----|-----|-----|
| 179° | 4.4 | 4.3 | 4.1 | 4.2 | 4.4 |
| 179.5° | 3.8 | 4.1 | 3.9 | 3.8 | 4.2 |



(END OF REPORT)