

Test Report for Luminous Intensity Distributions

Test Standard : CIE 70 (1987) 、 CIE 84 (1989)

Date of Receipt : 2020 / 01 / 15

Test Date : 2020 / 01 / 15 ~ 2020 / 01 / 30

1. Issue Date for test report : 2020 / 01 / 30
2. Report No : 20010302
3. Total pages : 20
4. Test report without steel stamp is not valid, and shall not be reproduced except in full.
5. Test sample is not sampling by laboratory, test result relate only to the items tested.
6. Test report is not responsible for advertisement or promotion for products.

Approved Signatory:



Test Report

Information for test items

Applicant : CoolLED Corp

Applicant address : 5F.-3, No.83, Sec. 2, Gongdao 5th Rd., East Dist.,
Hsinchu City 30070, Taiwan, R.O.C.

Manufacturer : CoolLED Corp

Manufacturer address : 5F.-3, No.83, Sec. 2, Gongdao 5th Rd., East Dist.,
Hsinchu City 30070, Taiwan, R.O.C.

Trademark or brand name : CoolLED

Product name : 11000lm LED Outdoor Floodlight

Product model number : F2110C-001

Rated input voltage (V) : 100~277

Rated input frequency (Hz) : 50 / 60

Rated input power (W) : 85

Dimension for test item LxWxH (mm) : 355 x 275 x 55

Apply of controlgear : MEAN WELL / XLG-75-36A

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Test Content

Test Condition

| | |
|----------------------------------|------|
| Temperature (°C) | 25.5 |
| Humidity (% RH) | 57.6 |
| γ Axis measurement of angles (°) | 5 |
| C Axis measurement of angles (°) | 5 |

Electrical Test

| Test item | Test Result |
|-------------------|-------------|
| Voltage(V) | 220.0 |
| Frequency(Hz) | 60 |
| Current (A) | 0.388 |
| Watt (W) | 84.4 |
| Power factor (PF) | 0.989 |

Luminosity Test

| Test item | Test Result |
|--|---|
| Total luminous flux of luminaires (lm) | 11082.9 |
| Initial luminaires efficiency(lm/W) | 131.3 |
| Central intensity (cd) | 4456.9 |
| Max intensity (cd) | 4511.4 |
| Angle for max intensity (°) | C : 330.0 γ : 0.0 |
| Beam Angle (50% I _{max}) | C0_180 Left=52.7 Right=53.5 |
| | C90_270 Left=52.0 Right=52.6 |
| Color temperature(K) | 5776 |
| Chromaticity Coordinates | x : 0.3263 y : 0.3410 |
| Rendering Index(Ra) | 81.8 |
| R9 | 5 |
| UGR , Unified Glare Rating | Viewing direction at right angles to lamp axis |
| | 30.7 |
| | Viewing direction parallel to lamp axis |
| | 30.3 |

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Diagram for luminous intensity distribution I

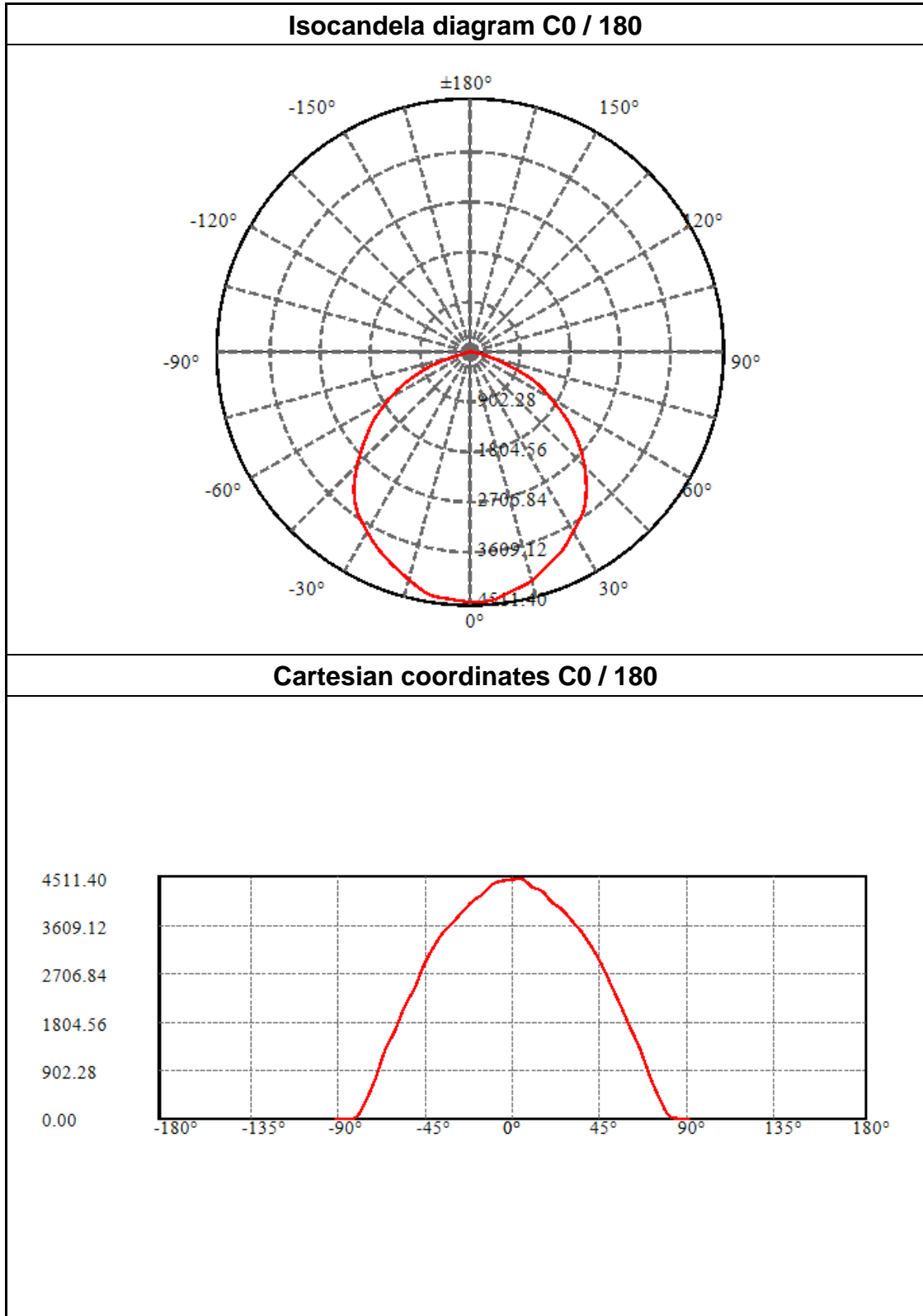


Diagram for luminous intensity distribution II

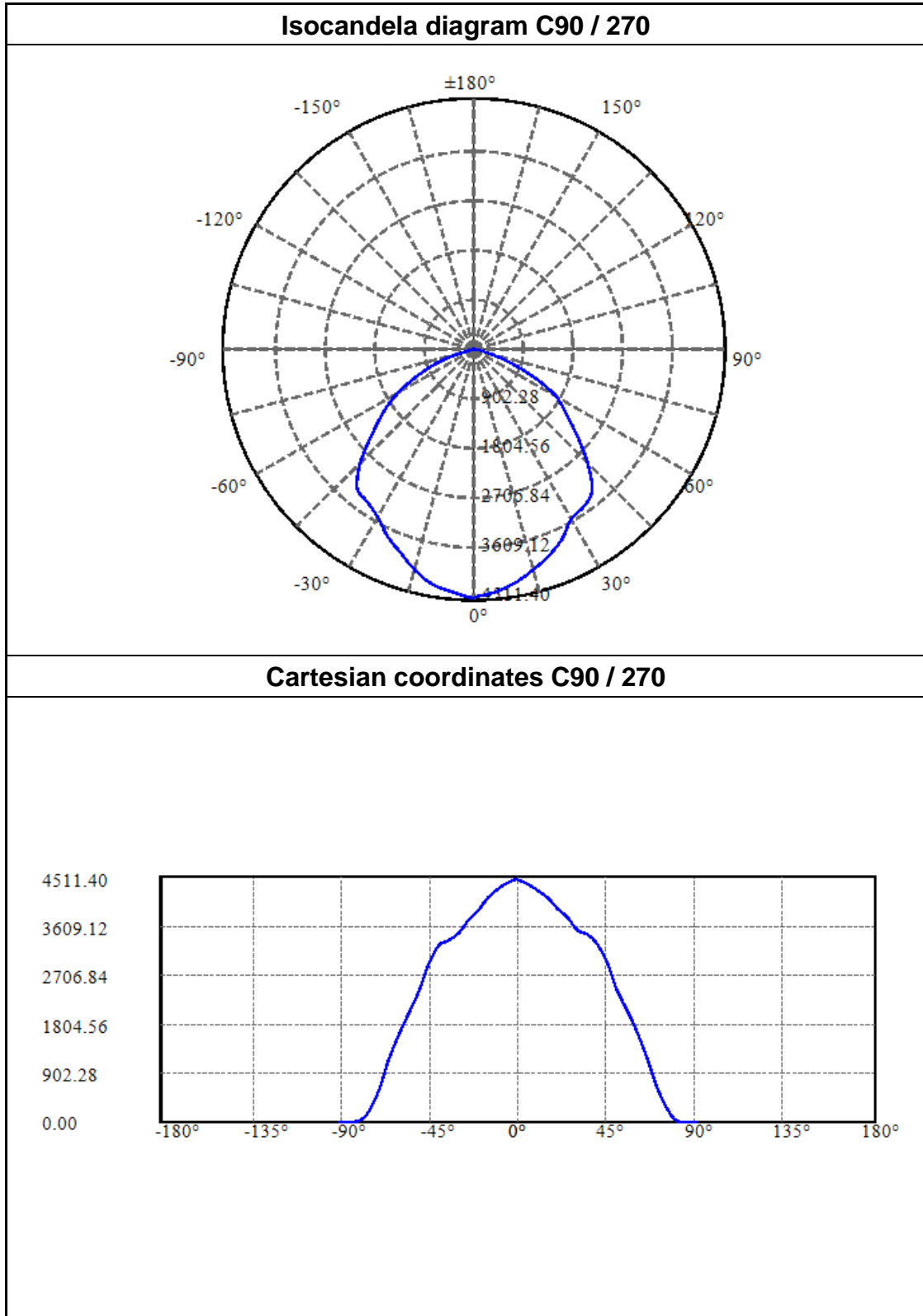
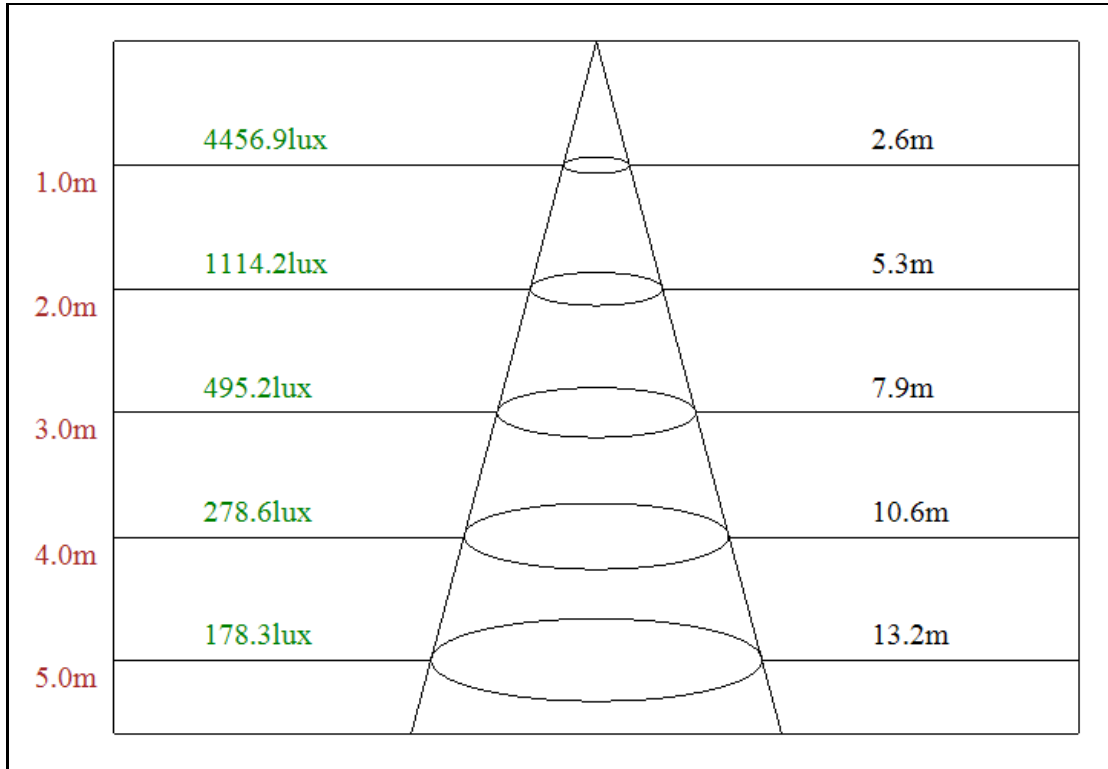


Diagram for illumination distance



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Test Results

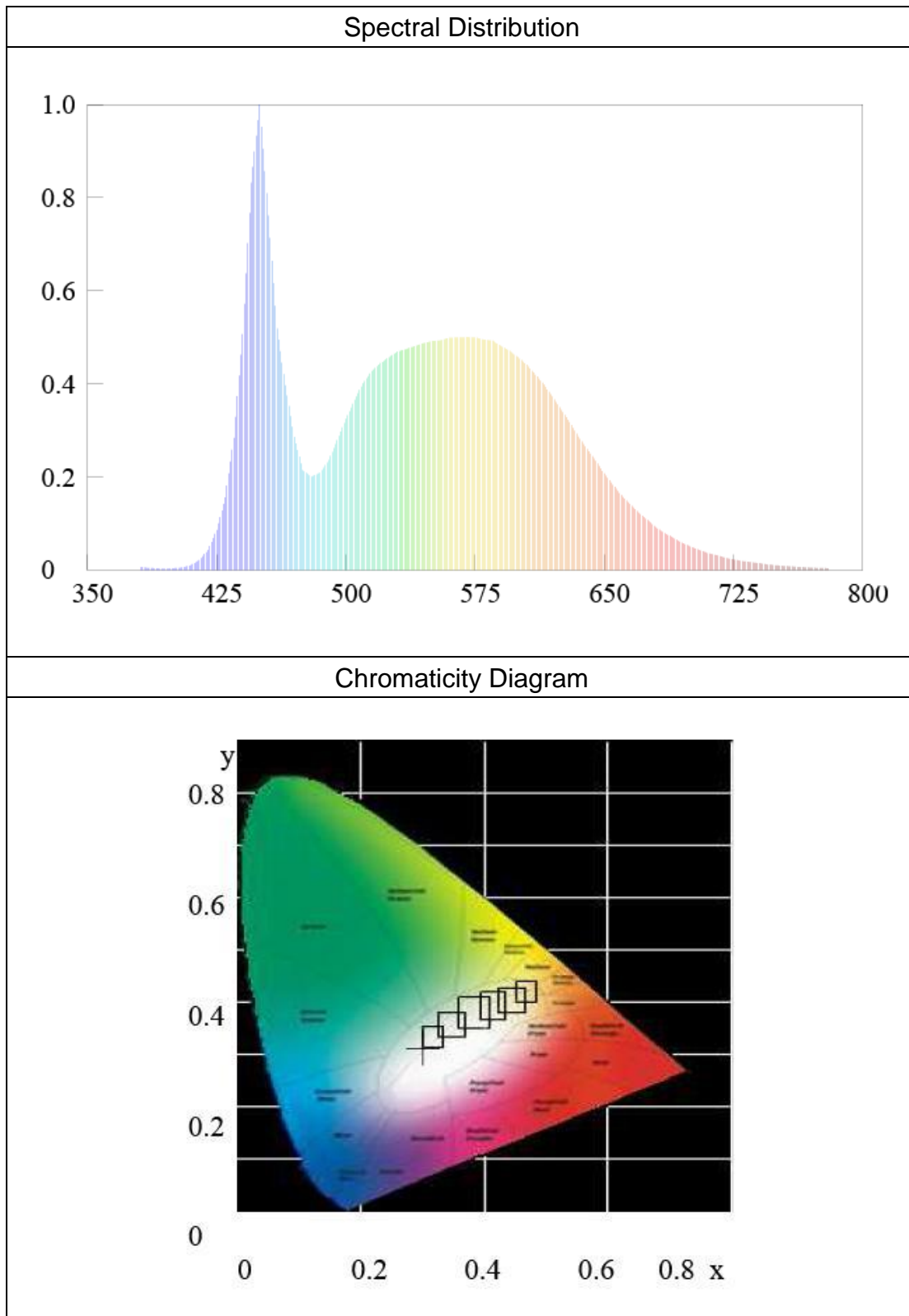
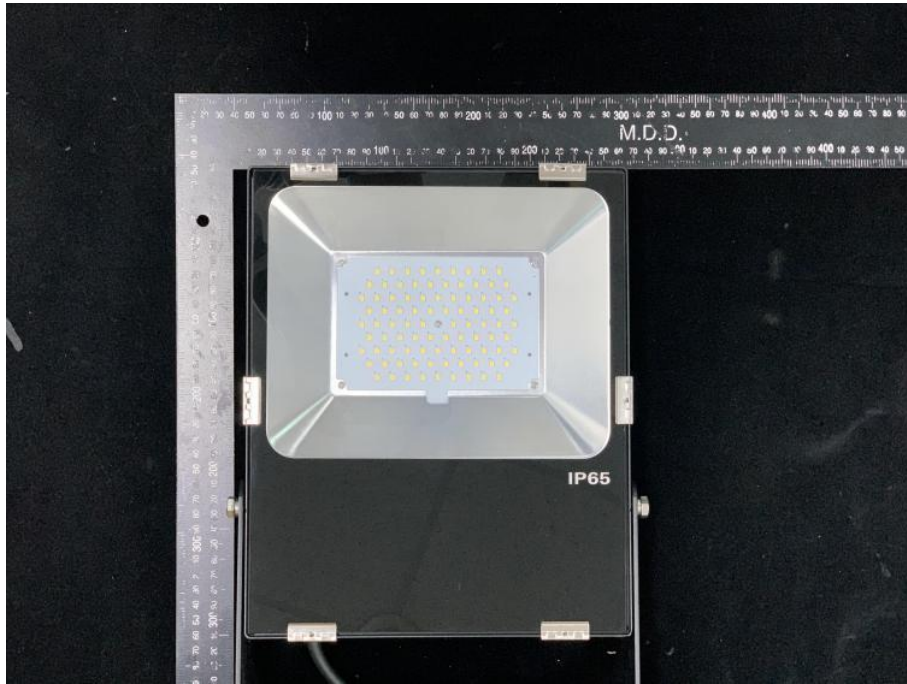


Photo for test items

The appearance of photo



The appearance of photo

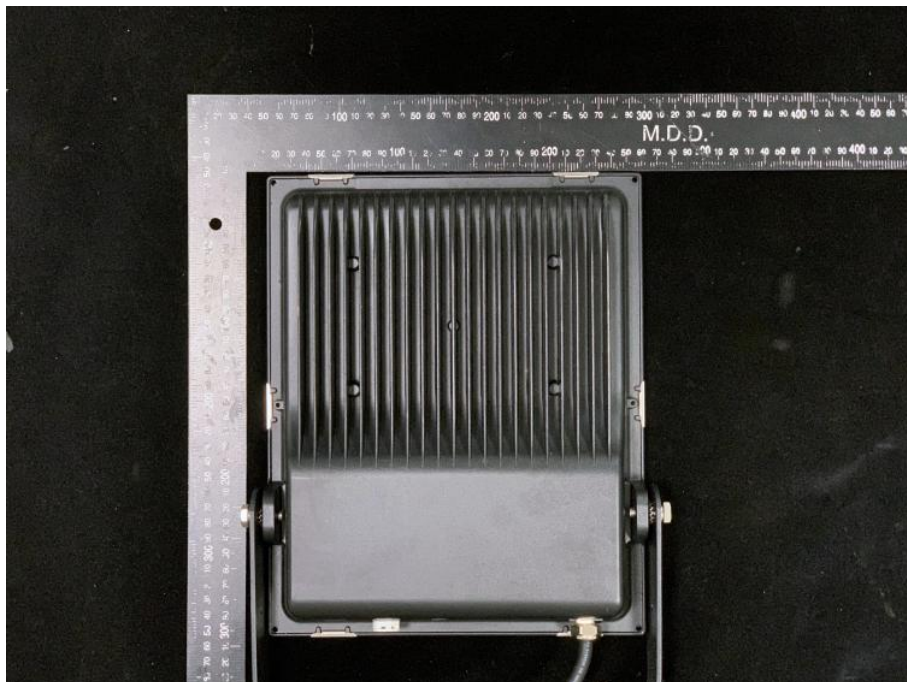
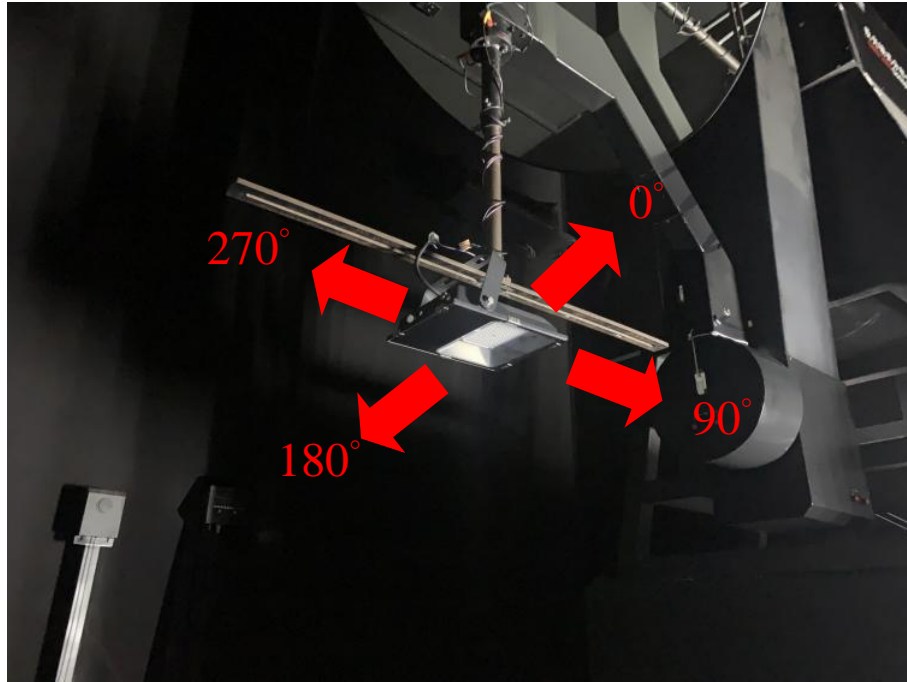


Photo for test items

Direction for luminaire position in goniophotometer



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Data for luminous intensity (1)

Intensity data(cd)

| $\gamma/C(^{\circ})$ | 0.0 | 5.0 | 10.0 | 15.0 | 20.0 | 25.0 | 30.0 | 35.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4456.92 | 4461.166 | 4454.09 | 4456.213 | 4463.289 | 4476.732 | 4495.836 | 4461.166 |
| 5 | 4448.43 | 4415.882 | 4430.741 | 4429.326 | 4423.665 | 4403.146 | 4396.778 | 4418.004 |
| 10 | 4318.239 | 4343.711 | 4326.021 | 4324.607 | 4323.192 | 4337.343 | 4321.069 | 4306.917 |
| 15 | 4232.624 | 4208.567 | 4203.614 | 4195.123 | 4185.925 | 4172.481 | 4161.16 | 4171.773 |
| 20 | 4036.63 | 4055.734 | 4044.413 | 4027.431 | 4016.111 | 4008.327 | 3989.931 | 3984.978 |
| 25 | 3897.24 | 3878.136 | 3861.863 | 3839.221 | 3826.484 | 3798.182 | 3767.757 | 3742.992 |
| 30 | 3688.51 | 3686.388 | 3653.132 | 3639.689 | 3593.697 | 3561.149 | 3544.168 | 3534.97 |
| 35 | 3486.856 | 3487.563 | 3447.94 | 3406.194 | 3372.939 | 3346.051 | 3328.362 | 3281.663 |
| 40 | 3214.445 | 3225.766 | 3188.265 | 3150.057 | 3118.217 | 3096.99 | 3091.33 | 3047.461 |
| 45 | 2879.062 | 2885.43 | 2858.542 | 2840.146 | 2828.117 | 2796.277 | 2807.598 | 2809.013 |
| 50 | 2511.13 | 2492.026 | 2468.677 | 2455.233 | 2465.846 | 2452.403 | 2472.922 | 2520.329 |
| 55 | 2105.698 | 2098.623 | 2098.623 | 2080.934 | 2088.01 | 2090.84 | 2120.557 | 2171.502 |
| 60 | 1708.757 | 1708.757 | 1697.436 | 1694.606 | 1710.173 | 1736.352 | 1751.211 | 1756.164 |
| 65 | 1296.957 | 1296.25 | 1294.835 | 1294.835 | 1315.354 | 1328.798 | 1330.92 | 1306.156 |
| 70 | 822.1847 | 826.4301 | 832.0906 | 837.0435 | 871.0063 | 878.7895 | 904.9692 | 906.3844 |
| 75 | 353.9215 | 360.2895 | 364.3227 | 366.4453 | 390.9269 | 399.4176 | 416.1868 | 400.6205 |
| 80 | 60.85016 | 62.4068 | 66.01535 | 75.14288 | 78.18538 | 78.25613 | 75.70892 | 73.30322 |
| 85 | 13.5144 | 13.58515 | 13.58515 | 13.58515 | 13.5144 | 13.37288 | 13.23137 | 13.08986 |
| 90 | 3.042508 | 3.113264 | 3.113264 | 3.18402 | 3.113264 | 3.113264 | 3.042508 | 3.042508 |

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Data for luminous intensity (2)

Intensity data(cd)

Page: 2 Total:10

| $\gamma/C(^{\circ})$ | 40.0 | 45.0 | 50.0 | 55.0 | 60.0 | 65.0 | 70.0 | 75.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4463.289 | 4459.75 | 4461.166 | 4463.289 | 4483.1 | 4463.289 | 4463.289 | 4459.75 |
| 5 | 4415.174 | 4415.174 | 4406.684 | 4413.759 | 4395.363 | 4405.269 | 4396.778 | 4407.391 |
| 10 | 4308.333 | 4298.427 | 4293.474 | 4289.229 | 4287.106 | 4287.813 | 4285.691 | 4274.37 |
| 15 | 4159.745 | 4152.669 | 4146.302 | 4144.886 | 4133.565 | 4130.735 | 4119.415 | 4115.876 |
| 20 | 3969.412 | 3958.798 | 3955.26 | 3941.109 | 3929.081 | 3940.401 | 3941.817 | 3951.015 |
| 25 | 3742.285 | 3741.577 | 3731.672 | 3741.577 | 3730.964 | 3739.455 | 3739.455 | 3735.209 |
| 30 | 3515.865 | 3505.96 | 3503.837 | 3513.743 | 3532.847 | 3523.649 | 3542.753 | 3550.536 |
| 35 | 3273.173 | 3260.436 | 3280.956 | 3288.739 | 3304.305 | 3350.297 | 3376.476 | 3408.316 |
| 40 | 3041.8 | 3046.753 | 3078.594 | 3111.141 | 3153.595 | 3193.926 | 3214.445 | 3234.964 |
| 45 | 2818.919 | 2857.835 | 2881.892 | 2903.119 | 2917.978 | 2917.27 | 2906.656 | 2910.194 |
| 50 | 2579.056 | 2596.038 | 2593.915 | 2556.414 | 2516.791 | 2494.149 | 2474.337 | 2456.648 |
| 55 | 2191.313 | 2181.407 | 2165.134 | 2125.51 | 2078.811 | 2064.66 | 2051.216 | 2037.065 |
| 60 | 1733.522 | 1720.078 | 1708.05 | 1699.559 | 1691.776 | 1688.238 | 1681.162 | 1673.379 |
| 65 | 1299.08 | 1296.957 | 1296.957 | 1299.08 | 1303.326 | 1301.203 | 1290.589 | 1233.985 |
| 70 | 901.4315 | 892.9407 | 815.1091 | 812.9865 | 772.6555 | 719.5885 | 718.1734 | 708.2676 |
| 75 | 379.7475 | 379.6767 | 364.0396 | 325.6899 | 311.3264 | 287.4109 | 256.915 | 252.2451 |
| 80 | 63.32662 | 55.75573 | 42.52436 | 32.54776 | 25.25989 | 24.62309 | 24.05704 | 23.42024 |
| 85 | 12.73608 | 12.52381 | 12.24079 | 11.88701 | 11.53323 | 11.25021 | 11.03794 | 10.75491 |
| 90 | 2.971752 | 2.971752 | 2.83024 | 2.688728 | 2.759484 | 2.759484 | 2.688728 | 2.617972 |

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Data for luminous intensity (3)

Intensity data(cd) Page: 3 Total:10

| $\gamma/C(^{\circ})$ | 80.0 | 85.0 | 90.0 | 95.0 | 100.0 | 105.0 | 110.0 | 115.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4467.534 | 4479.562 | 4453.383 | 4450.552 | 4453.383 | 4459.043 | 4460.458 | 4459.75 |
| 5 | 4395.363 | 4396.778 | 4384.75 | 4394.655 | 4391.825 | 4394.655 | 4403.854 | 4401.731 |
| 10 | 4275.785 | 4257.389 | 4267.294 | 4280.738 | 4282.861 | 4283.568 | 4279.323 | 4281.446 |
| 15 | 4113.754 | 4125.075 | 4115.876 | 4110.216 | 4111.631 | 4112.338 | 4120.829 | 4128.613 |
| 20 | 3936.156 | 3924.835 | 3936.156 | 3936.156 | 3934.741 | 3935.448 | 3935.448 | 3938.986 |
| 25 | 3754.313 | 3759.266 | 3757.851 | 3732.379 | 3736.625 | 3728.134 | 3719.643 | 3716.813 |
| 30 | 3552.659 | 3536.385 | 3527.187 | 3549.121 | 3537.8 | 3520.111 | 3505.252 | 3484.025 |
| 35 | 3430.958 | 3439.449 | 3433.789 | 3424.591 | 3397.703 | 3363.74 | 3333.315 | 3297.937 |
| 40 | 3244.87 | 3258.314 | 3290.154 | 3237.795 | 3225.059 | 3192.511 | 3174.114 | 3138.029 |
| 45 | 2904.534 | 2902.411 | 2904.534 | 2869.864 | 2864.91 | 2865.618 | 2869.864 | 2873.401 |
| 50 | 2452.403 | 2438.959 | 2450.28 | 2434.714 | 2437.544 | 2445.327 | 2460.186 | 2478.583 |
| 55 | 2037.773 | 2032.82 | 2051.216 | 2029.282 | 2027.159 | 2032.112 | 2036.358 | 2057.584 |
| 60 | 1674.087 | 1676.917 | 1691.776 | 1667.719 | 1659.228 | 1665.596 | 1660.643 | 1676.21 |
| 65 | 1184.455 | 1171.012 | 1176.672 | 1170.304 | 1189.408 | 1238.23 | 1279.268 | 1277.853 |
| 70 | 712.5129 | 686.3332 | 677.8425 | 691.2861 | 698.3617 | 706.1449 | 708.9751 | 710.3902 |
| 75 | 254.7216 | 248.9196 | 240.4289 | 244.1789 | 243.9667 | 244.0374 | 249.4149 | 275.4531 |
| 80 | 23.27872 | 22.92494 | 23.06646 | 23.06646 | 23.13721 | 23.27872 | 23.42024 | 23.42024 |
| 85 | 10.68416 | 10.54264 | 10.47189 | 10.47189 | 10.40113 | 10.40113 | 10.54264 | 10.54264 |
| 90 | 2.547216 | 2.47646 | 2.688728 | 2.617972 | 2.547216 | 2.759484 | 2.759484 | 2.83024 |

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Data for luminous intensity (4)

Intensity data(cd) Page: 4 Total:10

| $\gamma/C(^{\circ})$ | 120.0 | 125.0 | 130.0 | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4466.826 | 4471.071 | 4472.487 | 4466.119 | 4466.826 | 4473.194 | 4461.874 | 4473.194 |
| 5 | 4391.117 | 4408.806 | 4413.052 | 4415.882 | 4420.835 | 4438.524 | 4463.289 | 4431.448 |
| 10 | 4306.21 | 4289.937 | 4302.672 | 4304.087 | 4306.917 | 4295.597 | 4305.502 | 4323.192 |
| 15 | 4113.754 | 4135.688 | 4139.934 | 4145.594 | 4156.915 | 4183.802 | 4180.972 | 4173.188 |
| 20 | 3953.138 | 3934.033 | 3938.279 | 3953.845 | 3952.43 | 3941.109 | 3974.365 | 3984.978 |
| 25 | 3711.152 | 3713.275 | 3716.813 | 3711.152 | 3721.058 | 3761.389 | 3781.908 | 3776.955 |
| 30 | 3492.516 | 3468.459 | 3469.167 | 3472.704 | 3476.95 | 3487.563 | 3494.639 | 3558.319 |
| 35 | 3267.512 | 3247.7 | 3227.181 | 3241.332 | 3253.361 | 3263.974 | 3266.805 | 3336.146 |
| 40 | 3116.802 | 3055.951 | 3026.234 | 3013.498 | 3029.772 | 3058.782 | 3096.99 | 3104.773 |
| 45 | 2886.845 | 2865.618 | 2838.731 | 2818.919 | 2803.353 | 2802.645 | 2806.891 | 2792.739 |
| 50 | 2509.715 | 2554.292 | 2564.905 | 2567.028 | 2511.13 | 2473.63 | 2452.403 | 2410.657 |
| 55 | 2098.623 | 2133.293 | 2138.954 | 2155.228 | 2136.831 | 2119.142 | 2098.623 | 2054.754 |
| 60 | 1682.578 | 1679.747 | 1679.747 | 1697.436 | 1709.465 | 1719.371 | 1725.031 | 1685.408 |
| 65 | 1281.391 | 1275.023 | 1265.825 | 1269.363 | 1273.608 | 1290.589 | 1302.618 | 1296.957 |
| 70 | 781.8538 | 796.005 | 822.1847 | 876.6668 | 880.9122 | 866.0534 | 850.4871 | 824.3074 |
| 75 | 299.7932 | 323.4257 | 334.7466 | 352.7894 | 361.9877 | 365.3132 | 367.5067 | 347.6242 |
| 80 | 23.56175 | 27.24106 | 34.59969 | 41.39226 | 51.9349 | 51.01508 | 52.00566 | 49.17542 |
| 85 | 10.47189 | 10.54264 | 10.54264 | 10.54264 | 10.47189 | 10.47189 | 10.47189 | 10.33038 |
| 90 | 2.83024 | 2.83024 | 3.042508 | 2.971752 | 3.042508 | 3.042508 | 3.042508 | 3.042508 |

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Data for luminous intensity (5)

Intensity data(cd)

Page: 5 Total:10

| $\gamma/C(^{\circ})$ | 160.0 | 165.0 | 170.0 | 175.0 | 180.0 | 185.0 | 190.0 | 195.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4465.411 | 4471.779 | 4469.656 | 4466.119 | 4456.92 | 4473.194 | 4468.241 | 4466.826 |
| 5 | 4427.91 | 4434.279 | 4438.524 | 4433.571 | 4425.081 | 4443.477 | 4433.571 | 4440.646 |
| 10 | 4335.928 | 4337.343 | 4330.975 | 4335.928 | 4364.23 | 4333.098 | 4346.541 | 4342.296 |
| 15 | 4175.312 | 4183.095 | 4195.123 | 4202.906 | 4181.68 | 4210.689 | 4193 | 4188.048 |
| 20 | 4001.252 | 4011.865 | 4027.431 | 4038.045 | 4050.073 | 4030.969 | 4032.384 | 4018.941 |
| 25 | 3798.182 | 3822.947 | 3836.39 | 3847.004 | 3854.787 | 3845.589 | 3833.56 | 3815.164 |
| 30 | 3592.99 | 3619.877 | 3644.642 | 3670.114 | 3668.698 | 3653.84 | 3627.66 | 3593.697 |
| 35 | 3370.816 | 3412.562 | 3442.279 | 3471.997 | 3481.903 | 3461.384 | 3421.76 | 3386.382 |
| 40 | 3118.925 | 3152.887 | 3179.067 | 3196.756 | 3227.889 | 3184.02 | 3150.765 | 3130.953 |
| 45 | 2791.324 | 2801.23 | 2821.749 | 2843.684 | 2846.514 | 2834.485 | 2801.23 | 2779.296 |
| 50 | 2397.213 | 2404.996 | 2425.516 | 2438.959 | 2429.761 | 2426.223 | 2402.874 | 2392.968 |
| 55 | 2037.065 | 2042.726 | 2054.047 | 2060.415 | 2063.245 | 2049.801 | 2037.065 | 2029.99 |
| 60 | 1665.596 | 1662.766 | 1664.889 | 1664.181 | 1660.643 | 1661.351 | 1661.351 | 1652.153 |
| 65 | 1281.391 | 1267.24 | 1265.117 | 1263.702 | 1265.825 | 1262.287 | 1260.872 | 1262.995 |
| 70 | 819.3545 | 782.5613 | 764.8723 | 760.627 | 762.7496 | 757.7968 | 763.4572 | 790.3445 |
| 75 | 336.1618 | 328.3078 | 324.2747 | 312.9538 | 309.3452 | 312.3878 | 316.067 | 325.9729 |
| 80 | 45.42535 | 37.7837 | 30.92037 | 32.19398 | 30.14206 | 28.44391 | 30.35432 | 33.46759 |
| 85 | 10.33038 | 10.18886 | 10.18886 | 10.11811 | 10.18886 | 10.11811 | 10.18886 | 10.25962 |
| 90 | 3.113264 | 3.042508 | 3.042508 | 2.971752 | 2.971752 | 3.042508 | 3.042508 | 3.042508 |

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Data for luminous intensity (6)

| Intensity data(cd) | | | | | | | | | Page: 6 Total:10 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|------------------|
| $\gamma/C(^{\circ})$ | 200.0 | 205.0 | 210.0 | 215.0 | 220.0 | 225.0 | 230.0 | 235.0 | |
| 0 | 4475.317 | 4477.44 | 4468.949 | 4474.609 | 4467.534 | 4483.808 | 4479.562 | 4485.931 | |
| 5 | 4434.279 | 4444.185 | 4454.09 | 4430.033 | 4427.203 | 4427.203 | 4427.203 | 4426.496 | |
| 10 | 4333.098 | 4313.286 | 4309.041 | 4323.192 | 4322.484 | 4323.192 | 4320.361 | 4311.871 | |
| 15 | 4190.17 | 4200.784 | 4197.954 | 4169.651 | 4165.406 | 4155.5 | 4158.33 | 4156.208 | |
| 20 | 3997.007 | 3974.365 | 3970.827 | 3979.317 | 3964.459 | 3949.6 | 3934.033 | 3924.835 | |
| 25 | 3797.475 | 3792.522 | 3756.436 | 3716.105 | 3689.218 | 3679.312 | 3678.604 | 3684.265 | |
| 30 | 3556.197 | 3497.469 | 3455.015 | 3452.893 | 3444.402 | 3435.911 | 3433.789 | 3448.647 | |
| 35 | 3341.806 | 3278.833 | 3226.474 | 3222.228 | 3200.294 | 3189.68 | 3187.558 | 3204.539 | |
| 40 | 3082.131 | 3073.641 | 3043.923 | 2996.517 | 2968.922 | 2961.846 | 2976.705 | 3017.743 | |
| 45 | 2771.512 | 2781.418 | 2772.22 | 2755.946 | 2751.701 | 2778.588 | 2811.844 | 2851.467 | |
| 50 | 2384.477 | 2405.704 | 2443.205 | 2451.695 | 2513.253 | 2552.169 | 2547.216 | 2509.715 | |
| 55 | 2022.207 | 2045.556 | 2098.623 | 2114.189 | 2141.784 | 2141.077 | 2131.171 | 2091.547 | |
| 60 | 1654.983 | 1688.946 | 1722.201 | 1710.88 | 1696.729 | 1677.625 | 1649.322 | 1646.492 | |
| 65 | 1279.268 | 1296.957 | 1301.91 | 1275.731 | 1253.089 | 1251.674 | 1246.013 | 1252.381 | |
| 70 | 814.4016 | 831.3829 | 837.751 | 856.8551 | 865.3459 | 831.3829 | 783.2689 | 774.7782 | |
| 75 | 341.2562 | 352.5064 | 353.2139 | 349.3224 | 333.19 | 317.4822 | 325.3361 | 288.2599 | |
| 80 | 40.6847 | 43.79797 | 47.05274 | 50.37827 | 46.76972 | 37.71295 | 27.73635 | 24.19855 | |
| 85 | 10.33038 | 10.47189 | 10.47189 | 10.47189 | 10.54264 | 10.47189 | 10.33038 | 10.33038 | |
| 90 | 3.113264 | 3.042508 | 2.971752 | 2.971752 | 2.900996 | 2.83024 | 2.900996 | 2.688728 | |

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Data for luminous intensity (7)

Intensity data(cd)

Page: 7 Total:10

| $\gamma/C(^{\circ})$ | 240.0 | 245.0 | 250.0 | 255.0 | 260.0 | 265.0 | 270.0 | 275.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4486.638 | 4476.025 | 4473.902 | 4466.826 | 4480.27 | 4492.298 | 4484.515 | 4463.996 |
| 5 | 4409.514 | 4429.326 | 4422.25 | 4426.496 | 4418.004 | 4411.637 | 4393.948 | 4413.759 |
| 10 | 4319.654 | 4304.087 | 4309.041 | 4298.427 | 4301.965 | 4295.597 | 4287.813 | 4296.304 |
| 15 | 4134.98 | 4146.302 | 4134.98 | 4132.858 | 4122.245 | 4121.537 | 4106.678 | 4098.895 |
| 20 | 3909.269 | 3905.024 | 3910.684 | 3903.609 | 3901.486 | 3891.58 | 3892.288 | 3897.948 |
| 25 | 3681.435 | 3696.293 | 3701.954 | 3696.293 | 3707.614 | 3709.737 | 3700.539 | 3692.756 |
| 30 | 3457.846 | 3454.308 | 3471.997 | 3480.488 | 3481.195 | 3468.459 | 3476.242 | 3494.639 |
| 35 | 3223.644 | 3240.625 | 3268.219 | 3301.475 | 3320.579 | 3341.806 | 3347.466 | 3324.117 |
| 40 | 3064.442 | 3096.99 | 3132.368 | 3179.775 | 3200.294 | 3232.134 | 3260.436 | 3204.539 |
| 45 | 2869.156 | 2869.156 | 2863.495 | 2864.91 | 2859.25 | 2881.892 | 2886.845 | 2864.203 |
| 50 | 2482.12 | 2452.403 | 2433.299 | 2433.299 | 2422.686 | 2409.949 | 2417.733 | 2426.223 |
| 55 | 2045.556 | 1999.565 | 1982.583 | 1977.63 | 1981.168 | 1981.876 | 1986.121 | 1985.413 |
| 60 | 1635.879 | 1628.803 | 1618.19 | 1624.558 | 1618.897 | 1636.586 | 1638.001 | 1628.803 |
| 65 | 1248.136 | 1248.843 | 1168.182 | 1132.096 | 1129.973 | 1137.049 | 1141.294 | 1138.464 |
| 70 | 693.4088 | 689.1634 | 691.9937 | 658.7383 | 614.162 | 604.9638 | 611.3318 | 623.3604 |
| 75 | 285.3589 | 240.9949 | 242.127 | 218.4945 | 197.6923 | 193.5884 | 193.6592 | 203.0697 |
| 80 | 23.84477 | 23.6325 | 23.49099 | 23.34948 | 23.06646 | 22.85419 | 22.78343 | 22.78343 |
| 85 | 10.18886 | 10.11811 | 10.11811 | 10.04735 | 9.976596 | 9.976596 | 9.976596 | 9.976596 |
| 90 | 2.759484 | 2.688728 | 2.688728 | 2.47646 | 2.617972 | 2.47646 | 2.47646 | 2.547216 |

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Data for luminous intensity (8)

Intensity data(cd)

Page: 8 Total:10

| $\gamma/C(^{\circ})$ | 280.0 | 285.0 | 290.0 | 295.0 | 300.0 | 305.0 | 310.0 | 315.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4471.779 | 4471.779 | 4473.194 | 4478.147 | 4485.223 | 4476.025 | 4471.779 | 4480.978 |
| 5 | 4418.004 | 4421.542 | 4420.127 | 4422.25 | 4434.279 | 4427.91 | 4434.986 | 4434.986 |
| 10 | 4300.55 | 4294.182 | 4297.719 | 4304.795 | 4271.54 | 4299.842 | 4298.427 | 4308.333 |
| 15 | 4102.433 | 4113.046 | 4122.245 | 4127.905 | 4154.792 | 4146.302 | 4150.547 | 4161.868 |
| 20 | 3892.288 | 3900.071 | 3900.778 | 3890.165 | 3891.58 | 3929.081 | 3949.6 | 3961.628 |
| 25 | 3696.293 | 3694.171 | 3699.831 | 3692.048 | 3706.199 | 3689.926 | 3699.124 | 3712.567 |
| 30 | 3482.61 | 3481.195 | 3467.751 | 3465.629 | 3454.308 | 3463.506 | 3446.525 | 3465.629 |
| 35 | 3312.089 | 3288.031 | 3262.559 | 3237.087 | 3219.398 | 3225.059 | 3224.351 | 3226.474 |
| 40 | 3190.388 | 3149.35 | 3114.679 | 3087.792 | 3029.064 | 3007.13 | 2997.932 | 3006.422 |
| 45 | 2865.618 | 2876.939 | 2876.231 | 2888.26 | 2858.542 | 2831.655 | 2804.768 | 2794.154 |
| 50 | 2443.912 | 2447.45 | 2460.894 | 2496.979 | 2532.357 | 2572.688 | 2563.49 | 2545.093 |
| 55 | 1983.998 | 1997.442 | 2014.423 | 2063.953 | 2094.378 | 2145.322 | 2167.256 | 2182.115 |
| 60 | 1632.341 | 1635.171 | 1650.737 | 1656.398 | 1661.351 | 1676.917 | 1708.05 | 1727.154 |
| 65 | 1141.294 | 1195.776 | 1269.363 | 1272.901 | 1272.193 | 1270.778 | 1282.806 | 1289.882 |
| 70 | 681.3802 | 708.9751 | 702.6071 | 707.56 | 805.2033 | 801.6655 | 878.082 | 894.3559 |
| 75 | 241.9148 | 248.2121 | 246.0186 | 304.6753 | 303.4725 | 356.4687 | 341.6807 | 371.2567 |
| 80 | 22.9957 | 23.20797 | 23.77402 | 24.05704 | 24.7646 | 36.93463 | 47.05274 | 58.23219 |
| 85 | 10.18886 | 10.33038 | 10.54264 | 10.89642 | 11.10869 | 11.32096 | 11.67474 | 11.81625 |
| 90 | 2.547216 | 2.617972 | 2.617972 | 2.83024 | 2.83024 | 2.900996 | 2.83024 | 2.900996 |

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Data for luminous intensity (9)

Intensity data(cd)

Page: 9 Total:10

| $\gamma/C(^{\circ})$ | 320.0 | 325.0 | 330.0 | 335.0 | 340.0 | 345.0 | 350.0 | 355.0 |
|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 4478.854 | 4498.667 | 4511.402 | 4480.27 | 4473.902 | 4478.147 | 4483.1 | 4480.27 |
| 5 | 4435.694 | 4412.344 | 4407.391 | 4427.203 | 4436.401 | 4434.986 | 4420.835 | 4426.496 |
| 10 | 4317.531 | 4343.711 | 4324.607 | 4335.22 | 4330.267 | 4338.758 | 4335.928 | 4340.881 |
| 15 | 4165.406 | 4167.528 | 4175.312 | 4188.048 | 4195.831 | 4207.859 | 4219.18 | 4219.18 |
| 20 | 3975.78 | 3999.837 | 3997.007 | 4017.526 | 4033.092 | 4045.121 | 4052.904 | 4058.564 |
| 25 | 3724.596 | 3764.219 | 3778.371 | 3803.843 | 3827.899 | 3859.032 | 3880.259 | 3886.627 |
| 30 | 3487.563 | 3505.252 | 3562.564 | 3594.405 | 3620.584 | 3652.425 | 3675.066 | 3699.831 |
| 35 | 3250.531 | 3296.522 | 3338.268 | 3351.712 | 3406.901 | 3441.572 | 3473.412 | 3496.761 |
| 40 | 3012.083 | 3067.98 | 3088.499 | 3107.604 | 3149.35 | 3171.991 | 3210.2 | 3230.719 |
| 45 | 2779.296 | 2789.201 | 2785.664 | 2806.183 | 2820.334 | 2841.561 | 2874.816 | 2888.26 |
| 50 | 2504.762 | 2454.526 | 2425.516 | 2441.082 | 2448.865 | 2463.724 | 2483.536 | 2506.177 |
| 55 | 2160.888 | 2119.142 | 2066.783 | 2079.519 | 2083.764 | 2086.594 | 2100.746 | 2102.868 |
| 60 | 1749.088 | 1762.532 | 1729.277 | 1708.757 | 1705.22 | 1693.191 | 1703.097 | 1708.757 |
| 65 | 1301.203 | 1334.458 | 1338.703 | 1321.722 | 1307.571 | 1300.495 | 1300.495 | 1296.957 |
| 70 | 902.139 | 880.9122 | 885.8651 | 870.2988 | 846.2418 | 827.8452 | 823.5999 | 816.5243 |
| 75 | 400.2667 | 409.8188 | 405.6441 | 385.2664 | 371.8936 | 363.4028 | 358.0254 | 355.9027 |
| 80 | 63.6804 | 70.47298 | 70.47298 | 69.83617 | 65.80308 | 59.93034 | 54.48212 | 57.17085 |
| 85 | 12.02852 | 12.17003 | 12.3823 | 12.59457 | 12.73608 | 12.94835 | 13.0191 | 13.30213 |
| 90 | 2.971752 | 2.971752 | 3.042508 | 2.971752 | 3.042508 | 3.18402 | 3.042508 | 3.113264 |

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Data for luminous intensity (10)

Intensity data(cd)

Page: 10 Total:10

| | |
|----------------------|----------|
| $\gamma/C(^{\circ})$ | 360.0 |
| 0 | 4456.92 |
| 5 | 4448.43 |
| 10 | 4318.239 |
| 15 | 4232.624 |
| 20 | 4036.63 |
| 25 | 3897.24 |
| 30 | 3688.51 |
| 35 | 3486.856 |
| 40 | 3214.445 |
| 45 | 2879.062 |
| 50 | 2511.13 |
| 55 | 2105.698 |
| 60 | 1708.757 |
| 65 | 1296.957 |
| 70 | 822.1847 |
| 75 | 353.9215 |
| 80 | 60.85016 |
| 85 | 13.5144 |
| 90 | 3.042508 |

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Equipment list and testing engineer for test

| Item | Equipment No | Equipment | Manufacturer / Type / Series No |
|---------------------------------|--------------|--|---------------------------------|
| 1 | 107A-01 | Magnetic angle locator | ACUANGLE A-300 |
| 2 | 99E-05 | Digital power meter | YOKOGAWA WT210 (91K116100) |
| 3 | 99E-08 | Digital power meter | YOKOGAWA WT210 (91K539455) |
| 4 | 99E-17 | AC Power Source | APC AFC-5KW |
| 5 | 99O-01 | Goniophotometer System | Sensing GMS-2000 |
| 6 | 99O-22 | Spectroradiometer (2 π) | Sensing SPR-3000 |
| 7 | 99O-23 | Integrating sphere (2 π) | Sensing |
| 8 | 108O-43 | Photometric standard lamp DC 22.3V/100W | Optics (SL810007) |
| 9 | 103T-14 | Temperature and humidity records | TANDD(TR-72UI/F8043A00) |
| Testing engineer : Chun-Tse Liu | | | |

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