**班号\_\_\_\_\_\_\_\_\_\_\_ 学号\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 姓名\_\_\_\_\_\_\_\_\_\_\_\_ 教师签字\_\_\_\_\_\_\_\_\_\_\_\_**

**实验日期\_\_\_\_\_\_\_\_ 组号\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 预习成绩\_\_\_\_\_\_\_\_\_ 总成绩\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**实验**（ ）\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **实验目的**
2. **实验原理**
3. **数据处理**

1．牛顿环

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| m | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 |
|  | 8.83 | 8.72 | 8.60 | 8.48 | 8.39 | 8.23 | 8.08 | 7.97 | 7.82 | 7.67 | 7.55 |
|  | 77.88 | 75.95 | 73.99 | 71.96 | 70.32 | 67.77 | 65.35 | 63.52 | 61.18 | 58.78 | 57.00 |
| n | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 |
|  | 7.38 | 7.23 | 7.08 | 6.95 | 6.75 | 6.52 | 6.37 | 6.21 | 7.38 | 7.23 | 7.08 |
|  | 54.41 | 52.32 | 50.15 | 48.34 | 45.56 | 42.46 | 40.53 | 38.53 | 54.41 | 52.32 | 50.15 |
|  | 23.48 | 23.63 | 23.84 | 23.62 | 24.76 | 25.31 | 24.83 | 24.99 | 23.48 | 23.63 | 23.84 |
|  | 24.91 | 24.91 | 24.91 | 24.91 | 24.91 | 24.91 | 24.91 | 24.91 | 24.91 | 24.91 | 24.91 |
|  | -1.43 | -1.27 | -1.07 | -1.29 | -0.14 | 0.40 | -0.08 | 0.09 | -1.43 | -1.27 | -1.07 |

得到









2．劈尖干涉

计算得



磁带厚度

1. **实验结论及现象分析**

通过对数据的处理及分析知：

牛顿环

磁带厚度

1. **讨论问题**

问题一：

钠灯光源不稳定，显示会忽明忽暗。

此现象对透镜曲率半径R并无影响。

问题二：

对应处的干涉条纹会弯曲，并弯向磁带（高处）一侧。

**实验现象观察与原始数据记录**

|  |  |  |  |
| --- | --- | --- | --- |
| **学生** | **姓名** | **学号** | **日期** |
| **签字** |  |  |  |

|  |  |
| --- | --- |
| **教师** | **姓名** |
| **签字** |  |