OBSERVATIONS:

Order of the ring	Microscopic Readings		Diameter of the ring	Radius of the Ring	r^2	$r_{n+m}^2 - r_n^2$	Mean of
	Left	Right					
N+21	5.652	5.955	0.103	0.051	26.01	599×10^{-8}	
N+18	5.605	5.807	0.202	0.101	102.01	762.4×10^{-8}	
N+15	5.554	5.851	0.299	0.148	219.04	824.3×10^{-8}	
N+12	5.509	5.903	0.394	0.197	388.09	668.2×10^{-8}	
N+9	5.455	5.955	0.500	0.250	625.00		5946 Å
N+6	5.408	5.996	0.588	0.294	884.36	713.5×10^{-8}	
N+3	5.398	6.045	0.647	0.323	1043.29		
N	5.353	6.003	0.650	0.325	1056.25		

Order of the ring (m) = 12 m

Radius of Curvature of lens (R) = 20 cm

Calculation:

1. $r_{n+m}^2 - r_n^2 = (0.250^2 - 0.05^2) \times 10^{-14} = 599 \times 10^{-8}$
2. $r_{n+m}^2 - r_n^2 = (0.294^2 - 0.101^2) \times 10^{-4} = 762.4 \times 10^{-8}$
3. $r_{n+m}^2 - r_n^2 = (0.325^2 - 0.197^2) \times 10^{-4} = 668.2 \times 10^{-8}$

Mean of $(r_{n+m}^2 - r_n^2) \times 10^{-4} = 713.5 \times 10^{-8}$

$$\lambda = \frac{713.5 \times 10^{-8}}{12 \times 1 \times 10^{-3}}$$

$$\lambda = 5946 \text{ Å}$$