

Faraday-Effekt

GaAs, hochrein
L= Interferenzfilter

$$d = 5,11 \text{ mm}$$

10 A, 18,2 V

| | Θ_1 | Winkel minuten | Θ_2 | Winkel minuten |
|---------------------|------------|-------------------|------------|-------------------|
| 1,06 μm | 149° | 6 | 173° | 37 |
| 1,29 μm | 245° | 4 | 261° | 12 |
| 1,45 μm | 149° | 36 | 163° | 11 |
| 1,72 μm | 153° | 43 | 163° | 18 |
| 1,96 μm | 157° | 55 | 165° | 15 |
| 2,156 μm | 167° | 0 | 161° | 22 |
| 2,34 μm | 189° | 16 | 184° | 81 |
| 2,51 μm | 213° | 343 | 209° | 25 |
| 2,65 μm | 175° | 34 | 170° | 28 |

← Lampe auf 8V

GaAs $N = 1,2 \cdot 10^{18} \frac{1}{\text{cm}^3}$ $d = 1,36 \text{ mm}$

| λ [μm] | Θ_1 (rot) [°] | [nm] | Θ_2 (blau) [°] | [nm] |
|--------------------------------|-------------------------|------|--------------------------|------|
| 1,06 | 249 | 10 | 240 | 37 |
| 1,29 | 250 | 1 | 244 | 4 |
| 1,45 | 250 | 33 | 244 | 58 |
| 1,72 | 249 | 54 | 243 | 47 |
| 1,96 | 251 | 33 | 240 | 06 |
| 2,156 | 250 | 35 | 243 | 43 |
| 2,34 | 191 | 45 | 184° | 30 |
| 2,51 | 205 | 27 | 192 | 48 |
| 2,65 | 173 | 11 | 170 | 0 |