# Resist Session Summary

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# Status and Future Outlook:
## Need to improve Resist Performance

- EUV resists today need improved sensitivity, higher resolution and lower LER.
- Resist performance of concern to source specification is resist sensitivity. However, there is a trade-off between sensitivity, resolution and LER
  - Increasing absorption will help resist sensitivity but will hurt profile and resolution.
  - Resist sensitivity depends on how many times a resist molecule causes the reaction. More reaction means increased sensitivity but also higher LER.
- Alpha spec for resist sensitivity (5 mJ/cm2), for a give resolution, cannot be met without sacrificing LER.

# Resist Performance Data

| Parameter | Alpha Specs | Data 1 | Data 2 | Data 3 |
|---|---|---|---|---|
| | | | | |
| **Resolution 1: 1** | 45 nm | 50 nm | 48 nm | 48 nm |
| | | | | |
| **Sensitivity** | <5 mJ cm2 | 20 | 7.4 | 2.7 |
| | | | | |
| **LER** | < 4 nm | ~4 | 5.9 | 11.1 |