

Power measurement 2 August

28 June (TS Liyuan)

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|---------------------------|----------------------|
| P1) DP2-447 output: | 93 mW |
| P2) Before fold mirror 3: | 83 mW -0.49dB |
| P3) After attenuator: | 77 mW -0.82 dB |
| P4) After 1m fibre: | 65 mW -1.44dB |

11 July (moving mirror + cleaning)

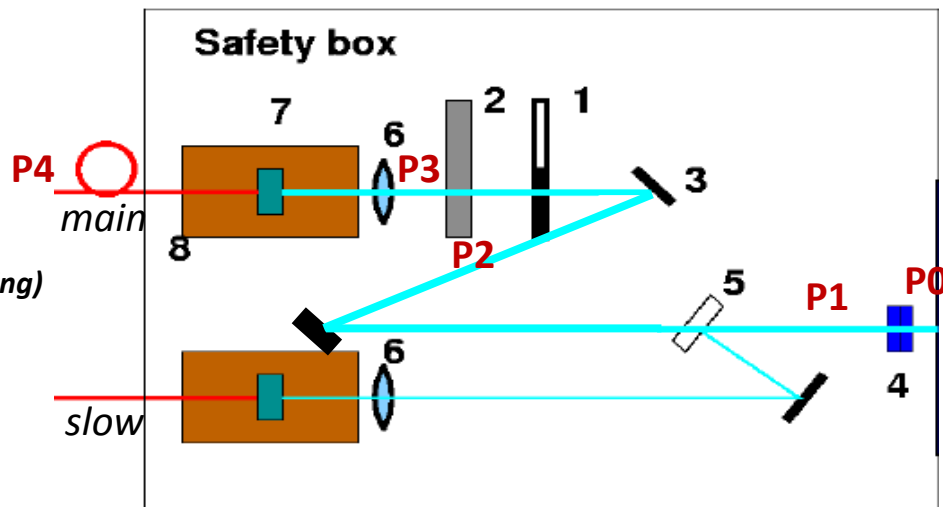
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|---------------------------|-----------------------|
| P1) DP2-447 output: | 89.3 mW |
| P2) Before fold mirror 3: | 80 mW -0.47dB |
| P3) After attenuator: | 70.5mW -1 dB |
| P4) After 1m fibre: | 62.5mW -1.55dB |

2 August before intervention

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|---------------------------|-------------------------------------|
| P0) Before filter: | 102 mW |
| P1) DP2-447 output: | 80 mW |
| P2) Before fold mirror 3: | 69.3 mW -0.6dB |
| P3) After attenuator: | 60.5mW -1.2 dB |
| P4) After 1m fibre: | - (don't want to touch main fibre) |

2 August after moving 4

| | |
|---------------------------|-------------------------------------|
| P1) DP2-447 output: | 93 mW |
| P2) Before fold mirror 3: | 84 mW -0.45dB |
| P3) After attenuator: | 68 mW - 1.36 dB |
| P4) After 1m fibre: | - (don't want to touch main fibre) |



Intervention :

- Increasing – decreasing diode current in order to perform power measurement;
- Moving and cleaning a bit the filter 4 in order to move the beam out of the spot: spot clearly visible because of blue reflection on its surface;
- Main fibre untouched do not create a second effect. This could explain why the overall loss is slightly higher than the 28 June (with same power $P1$). Overall alignment could be checked later on;
- Spot on mirror: occurred after 28 June (because of same power at this date), immediately after Liyuan's visit when B field was put ON, id. when data restarted.
- Wait and see if filter will be damaged again soon. If yes, dust could be excluded.