

**From:** TechSupport-CN  
**To:** Poenar Daniel Puiu (Assoc Prof)  
**Subject:** [ CAS-381731-L2B4V2 ] Inquiry about an optical filter  
**Date:** Tuesday, 8 June 2021 2:18:54 PM  
**Attachments:** image.png

Dear Daniel,

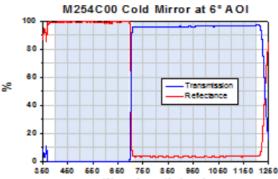
Thank you for your reply.

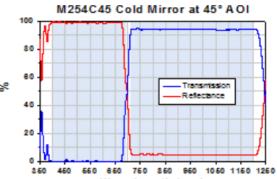
Sorry I made a mistake in the last email, these cold mirrors reflect from 400 to 690 nm and **transmit** from 710 to 1200 nm.

**Cold Mirrors**

| Specifications  |  |
|-----------------|--|
| Diameter        | Ø1" (Ø25.4 mm)                             |
| Thickness       | 5 mm                                       |
| Surface Quality | 20-10 Scratch-Dig                          |
| Wedge           | 30 ± 10 arcmin                             |
| Transmission    | T <sub>avg</sub> > 92% from 710 to 1200 nm |
| Reflection      | R <sub>avg</sub> > 97% from 400 to 690 nm  |

| Damage Thresholds |   |
|-------------------|---|
| M245C00           | 2 J/cm <sup>2</sup> (532 nm, 10 ns, 10 Hz, Ø0.337 mm)   |
| M245C45           | 0.5 J/cm <sup>2</sup> (532 nm, 10 ns, 10 Hz, Ø0.346 mm) |

**M254C00 Cold Mirror at 0° AOI**   
[Click to Enlarge](#)

**M254C45 Cold Mirror at 45° AOI**   
[Click to Enlarge](#)

For more detailed plots and downloadable data, please see the *Graphs* tab.

| +1                                  | Qty | Docs                                | Part Number - Universal  | Price    | Available               |
|-------------------------------------|-----|-------------------------------------|--|----------|-------------------------|
| <input checked="" type="checkbox"/> |     | <input checked="" type="checkbox"/> | <a href="#">M254C00</a> Ø1" UVFS Cold Mirror, AOI: 0°, 5 mm Thick  | ¥ 962.58 | <a href="#">2 Weeks</a> |
| <input checked="" type="checkbox"/> |     | <input checked="" type="checkbox"/> | <a href="#">M254C45</a> Ø1" UVFS Cold Mirror, AOI: 45°, 5 mm Thick | ¥ 962.58 | Today                   |

[Add To Cart](#)

We do not have the filter you described. Regarding the AOI 0° beam splitter, the cold mirror is the closest product, but unfortunately there is no beam splitting film that meets your needs.

If you have any concerns, feel free to reach out to me.

Thanks and Best Regards,

**Chloe DENG (邓操)**  
Application Engineer  
**THORLABS** China  
上海市祁连山南路2891弄100号A101, 200331  
T: 021-60561122 | F: 021-32513480

**我们正在招聘技术支持/研发/服务工程师,欢迎加入Thorlabs中国团队**

----- Original Message -----

**From:** Poenar Daniel Puiu (Assoc Prof) <epdpuiu@ntu.edu.sg>  
**Received:** Tue Jun 08 2021 13:54:38 GMT+0800 (China Standard Time)  
**To:** <techsupport-cn@thorlabs.com>;  
**Subject:** RE: [ CAS-381731-L2B4V2 ] Inquiry about an optical filter

Dear Ms. Chloe Deng,

Thanks for our reply but you got it all wrong! I don't want to reflect the visible range and don't want to absorb IR, did you read my e-mail and the data in it?  
The filter should **reflect the UV** (from 230 nm up to 380 or 400 nm) and **transmit very well in the whole visible range** (from 380 or 400 nm to 750 or 780 nm).

Please let me know if you can make such a filter.

Best wishes,

Daniel

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**From:** TechSupport-CN <TechSupport-CN@thorlabs.com>  
**Sent:** Tuesday, 8 June 2021 10:19 AM  
**To:** Poenar Daniel Puiu (Assoc Prof) <EPDPuiu@ntu.edu.sg>  
**Subject:** [ CAS-381731-L2B4V2 ] Inquiry about an optical filter  
**Importance:** High

Dear Daniel,

Thanks for contacting THORLABS China!

It looks more like a Cold Mirrors, the product link is as follows. These cold mirrors reflect from 400 to 690 nm and absorb from 710 to 1200 nm.  
UV Fused Silica Cold Mirrors: [https://www.thorlabs.de/newgroupage9.cfm?objectgroup\\_id=6108](https://www.thorlabs.de/newgroupage9.cfm?objectgroup_id=6108)  
Soda-Lime Cold Mirrors: [https://www.thorlabs.de/newgroupage9.cfm?objectgroup\\_id=897](https://www.thorlabs.de/newgroupage9.cfm?objectgroup_id=897)

Unfortunately, we do not provide cold mirror customization for other films.

Thanks and Best Regards,

**Chloe DENG (邓操)**

Application Engineer  
**THORLABS** China  
上海市祁连山南路2891弄100号A101, 200331  
T: 021-60561122 | F: 021-32513480

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----- Original Message -----

**From:** Poenar Daniel Puiu (Assoc Prof) <[EPPDPuiu@ntu.edu.sg](mailto:EPPDPuiu@ntu.edu.sg)>;  
**Received:** Mon Jun 07 2021 17:25:57 GMT+0800 (China Standard Time)  
**To:** Chinasales <[chinasales@thorlabs.com](mailto:chinasales@thorlabs.com)>; [chinasales@thorlabs.com](mailto:chinasales@thorlabs.com); <[techsupport-cn@thorlabs.com](mailto:techsupport-cn@thorlabs.com)>;  
**Subject:** Inquiry about an optical filter

Dear Lady/Sir,

I am an Assoc.Prof. in the EEE School of NTU of Singapore. I would like to know if you have available or if it is possible for you to fabricate a UV-vis long-pass dichroic mirror, although maybe a more appropriate name would be edge filter because the ideal desired operation should be for an AOI of 0°, NOT 45° as is typical with normal applications for dichroic mirrors (e.g. in a filter cube).

The specs for this filter are: high reflectivity (R>90%) in the UV (between 230 nm and 380 or 400 nm) and high transmissivity (T>90%) in the visible range (between approx.380 or 400 nm and 750...780 nm). If the latter too tough, the vis range transmission window's long wavelength limit can be reduced down to 600 nm or even 550 nm if really necessary.

If you have it/can do it, then please kindly send me quotation for it, including the cost of packaging & shipping.

Thank you for your help and am looking forward for your quick feedback !

With best wishes,

Poenar Daniel

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