

The QC of the Crystals Column D

31 Crystals in the Column D totally

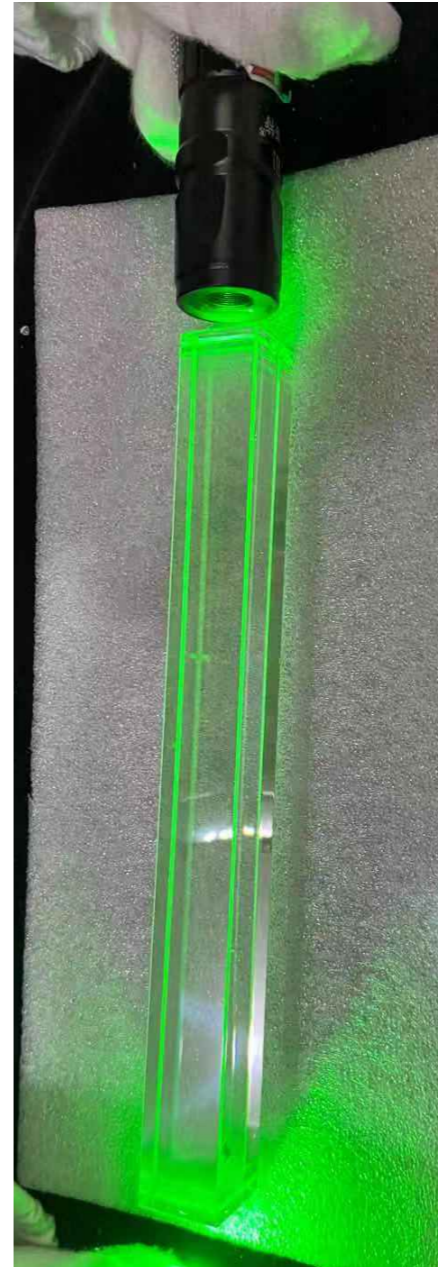
Yinghua Tan, Wenhuan Wang, Wenjie Wu and Zhenyu Zhang
Wuhan University

at Shanghai

45 ?

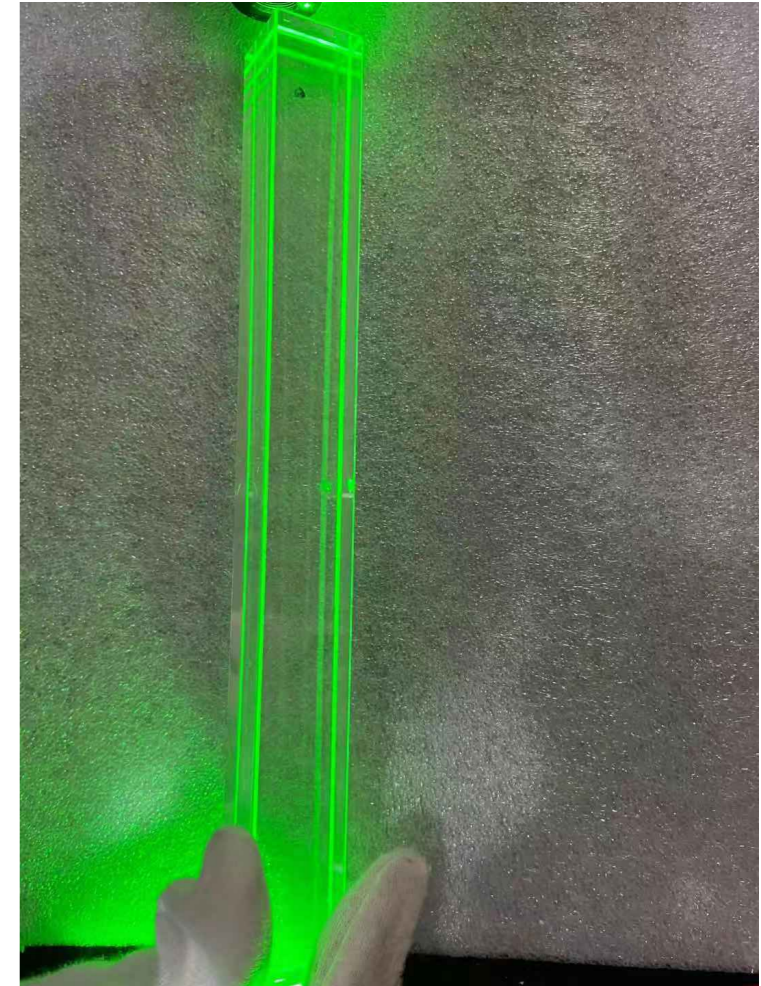
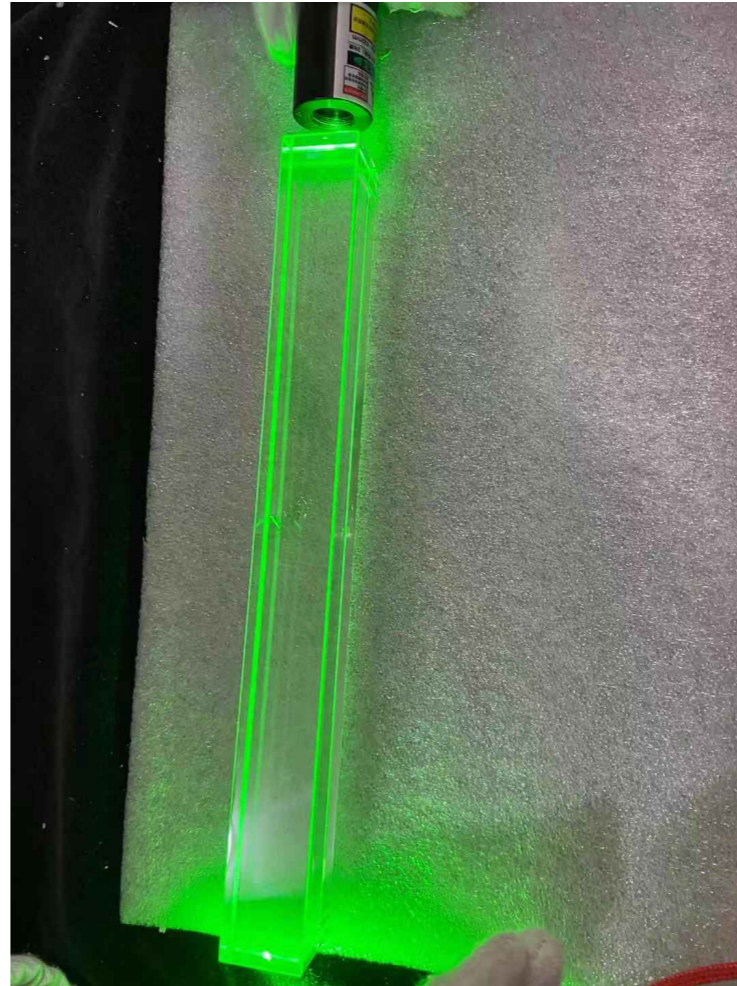
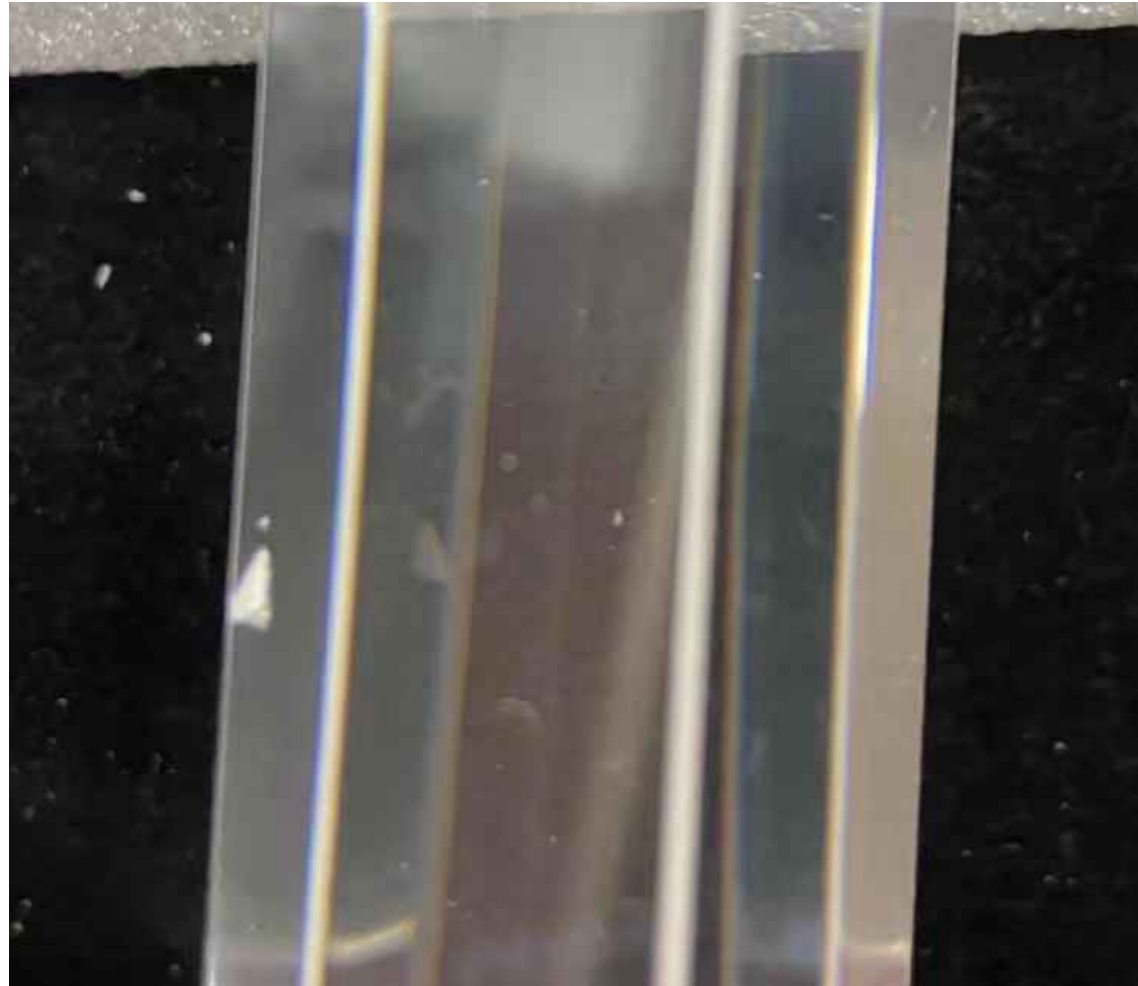


**Down-side
Not PMT side**



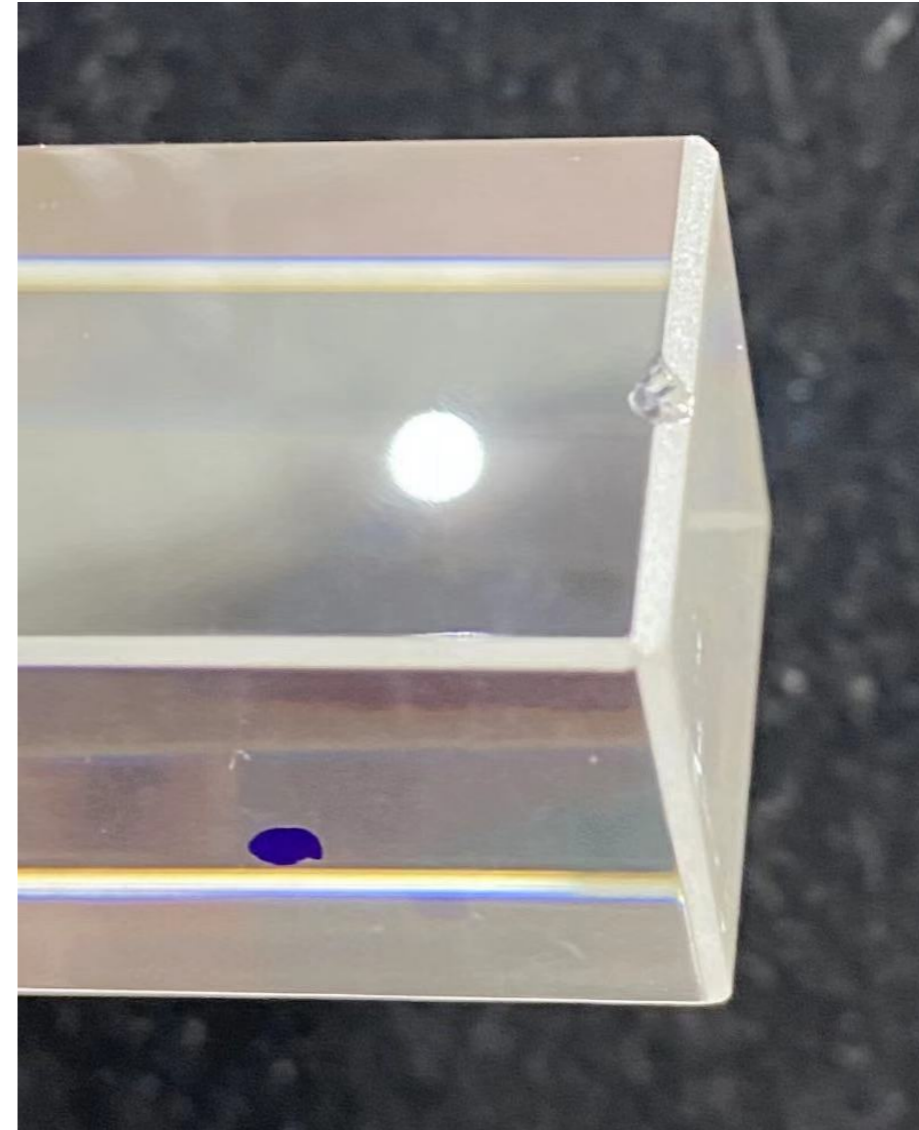
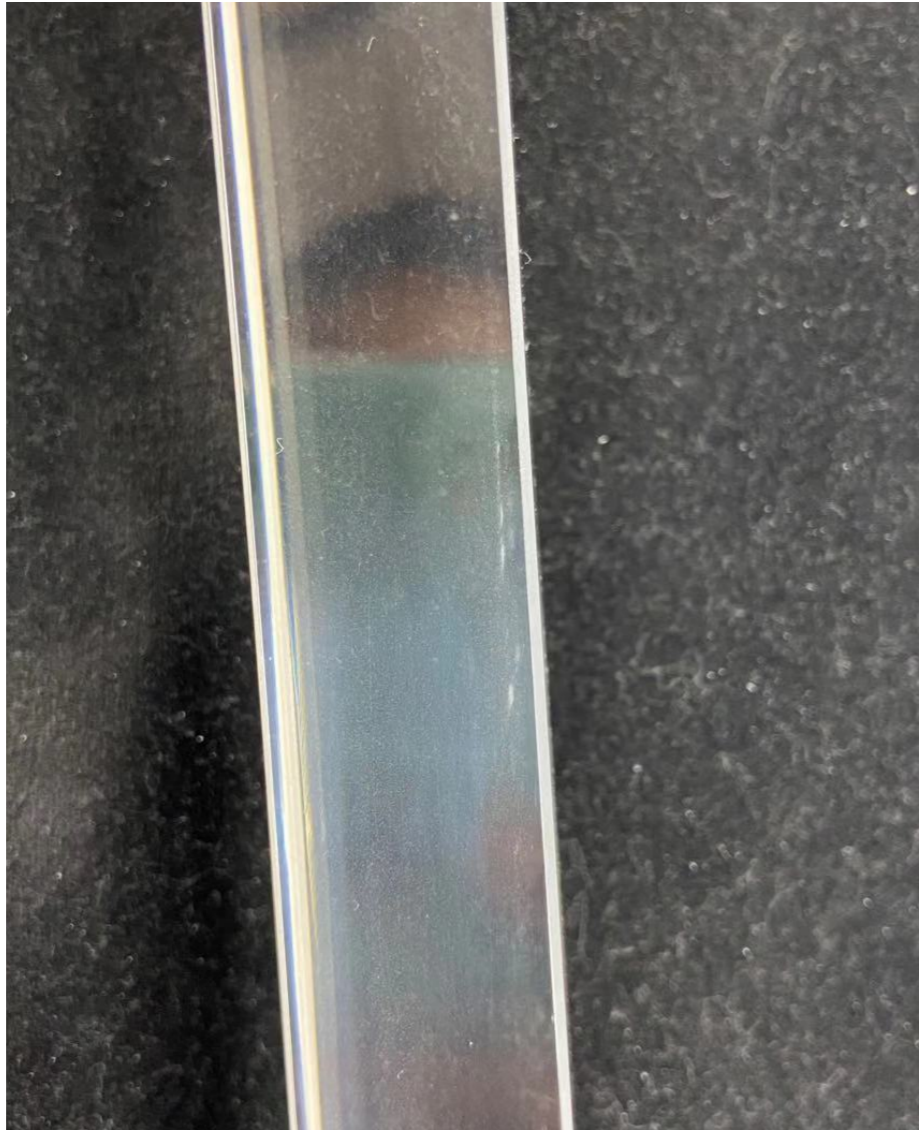
**Small chip
on the long side**

49 ?



- **Small chips on the long side**
- **Something outside and inside**

66 ?



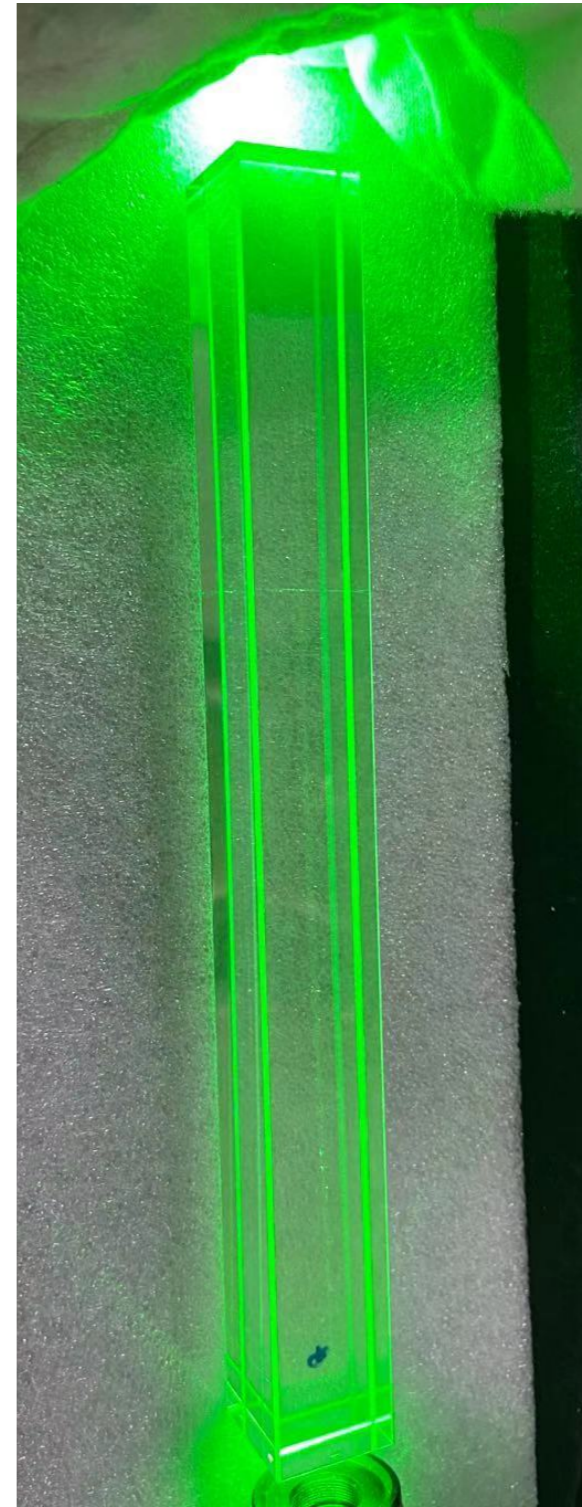
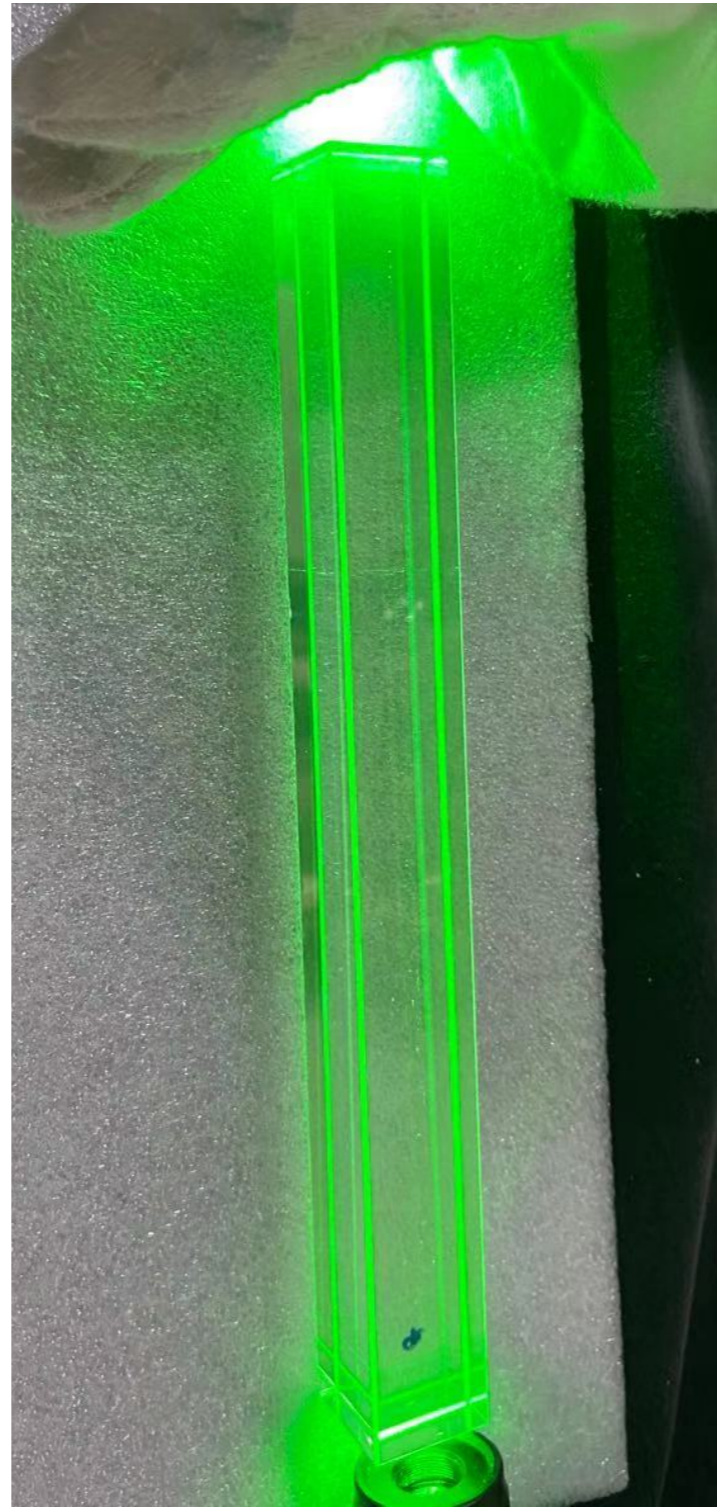
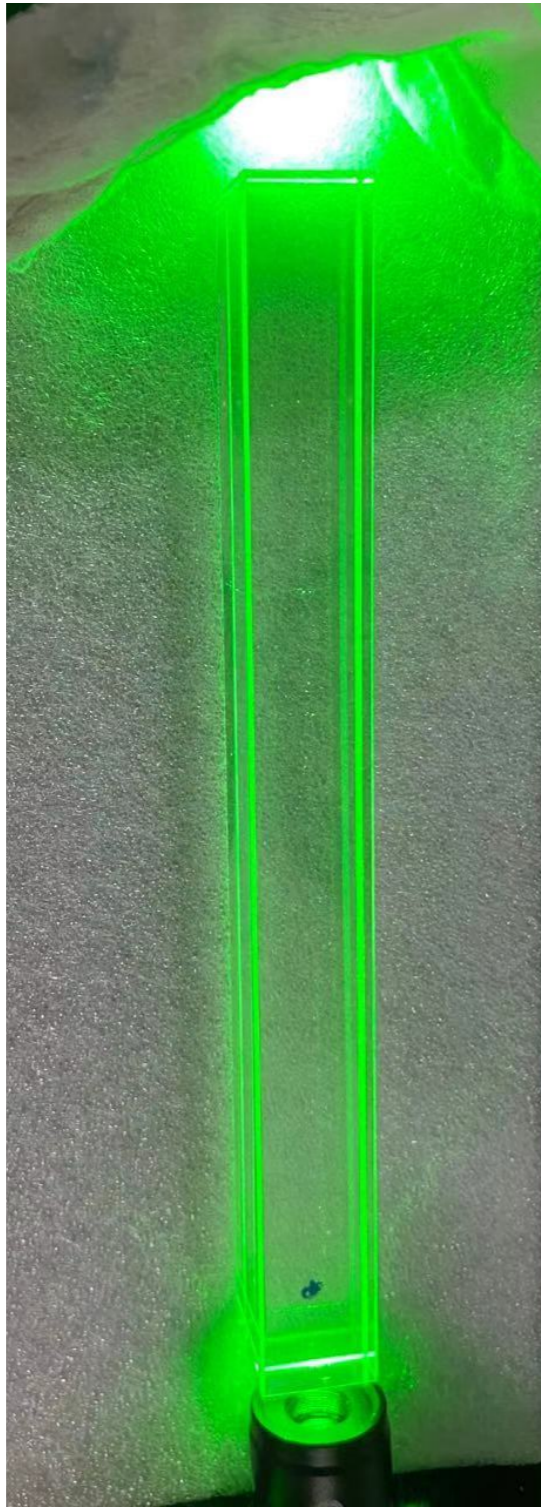
- **A chip on the up-side with PMT (Is it ok?)**
- **A scratch (which I think ok)**

67 ?



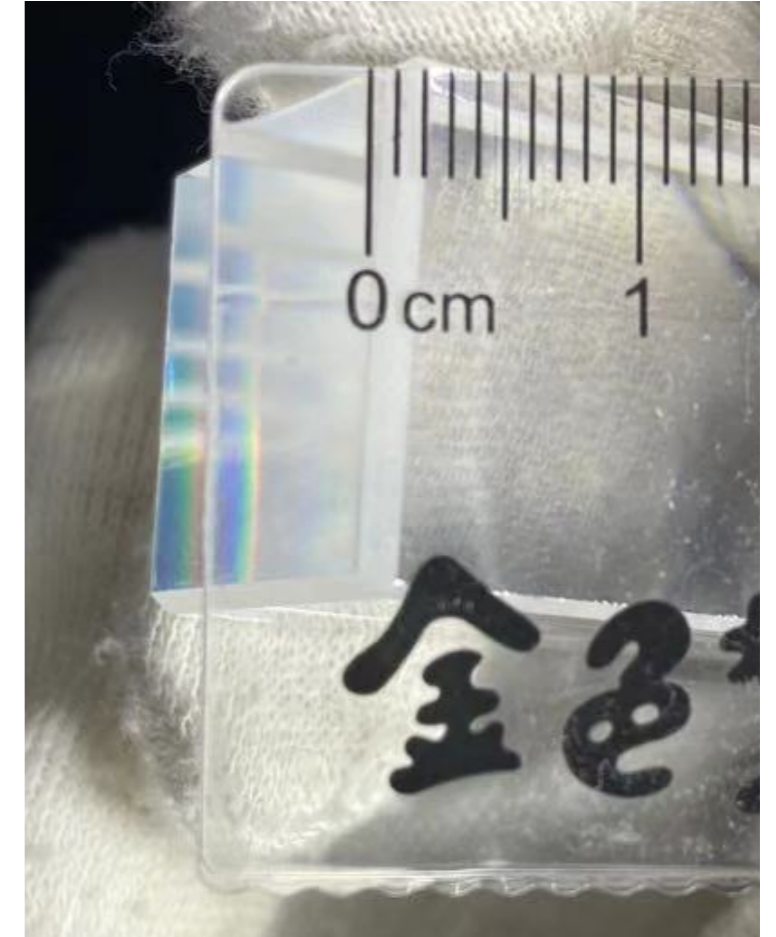
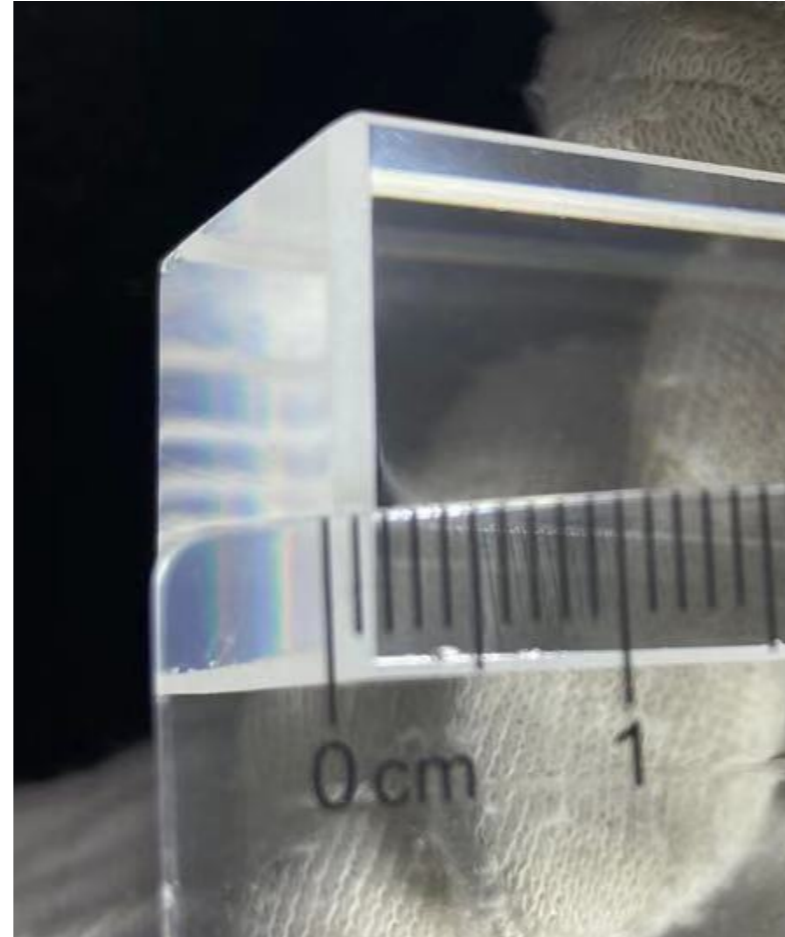
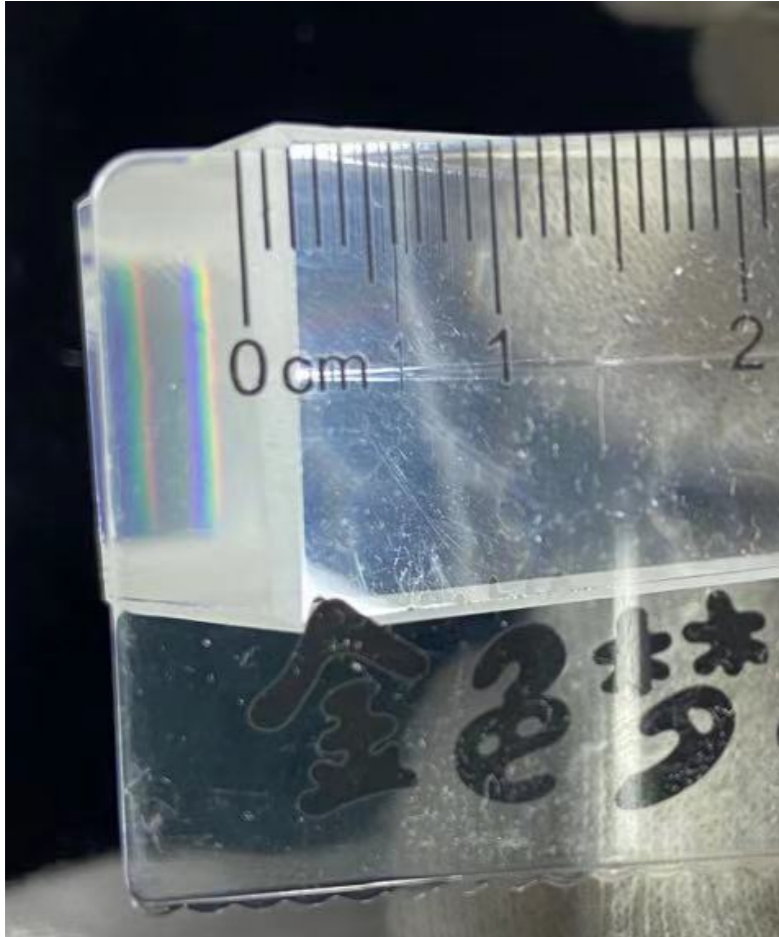
- **Scratches (May be ok?)**

68 ?



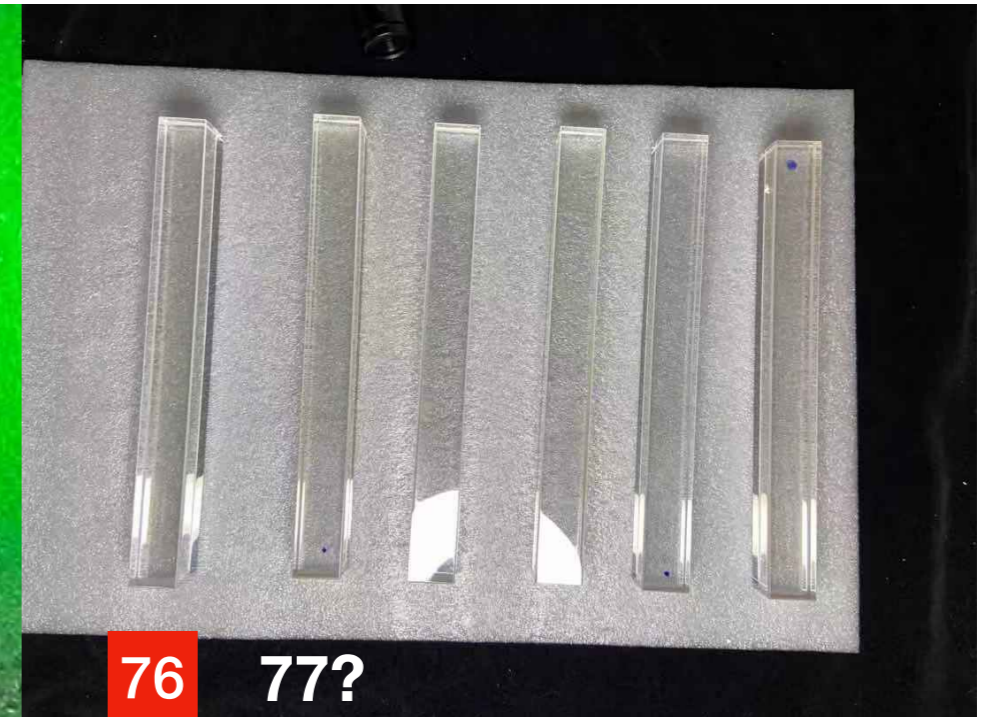
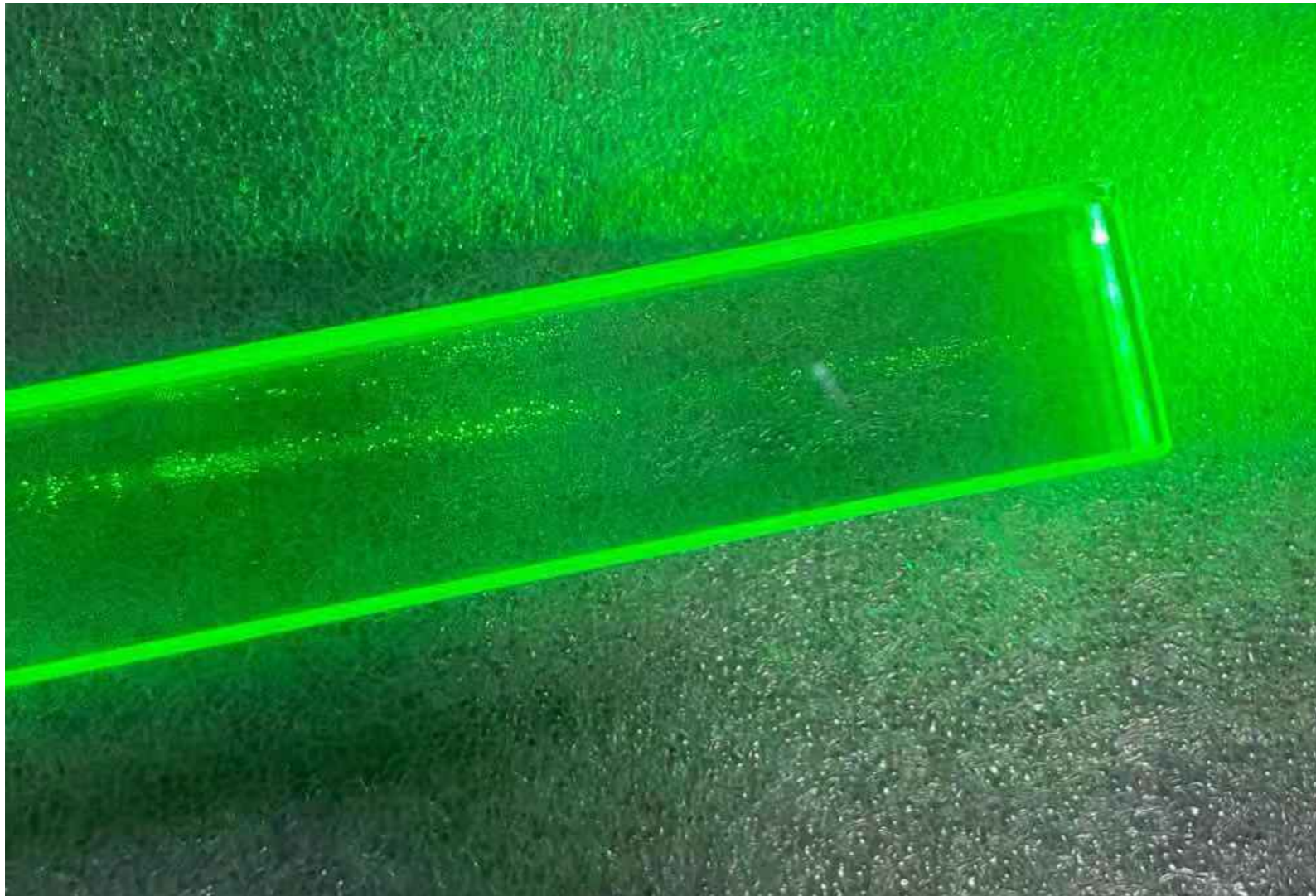
- A layer with green laser beam check

72 ?



- **Chamfers are about 2mm.**

77 ?

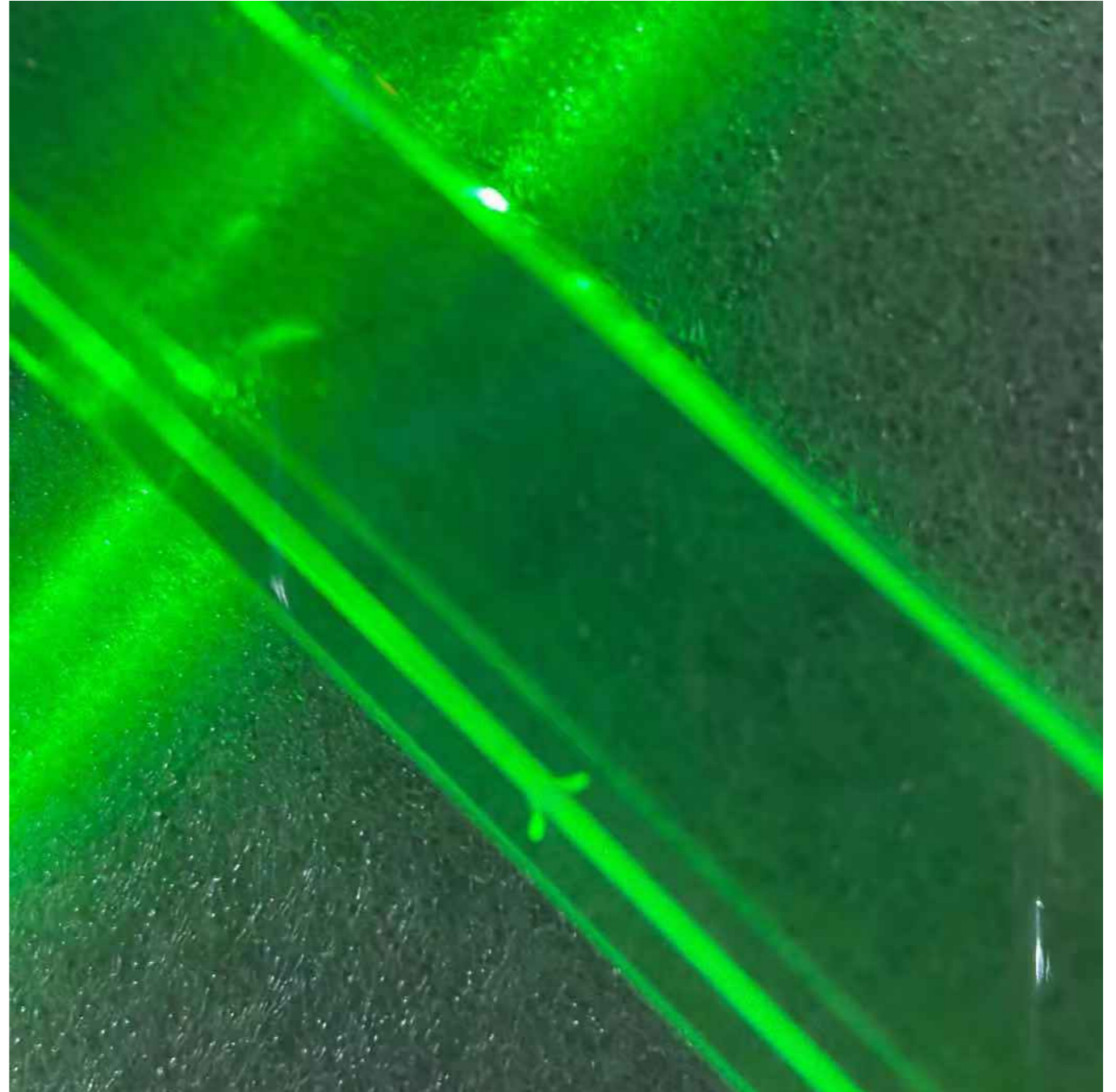
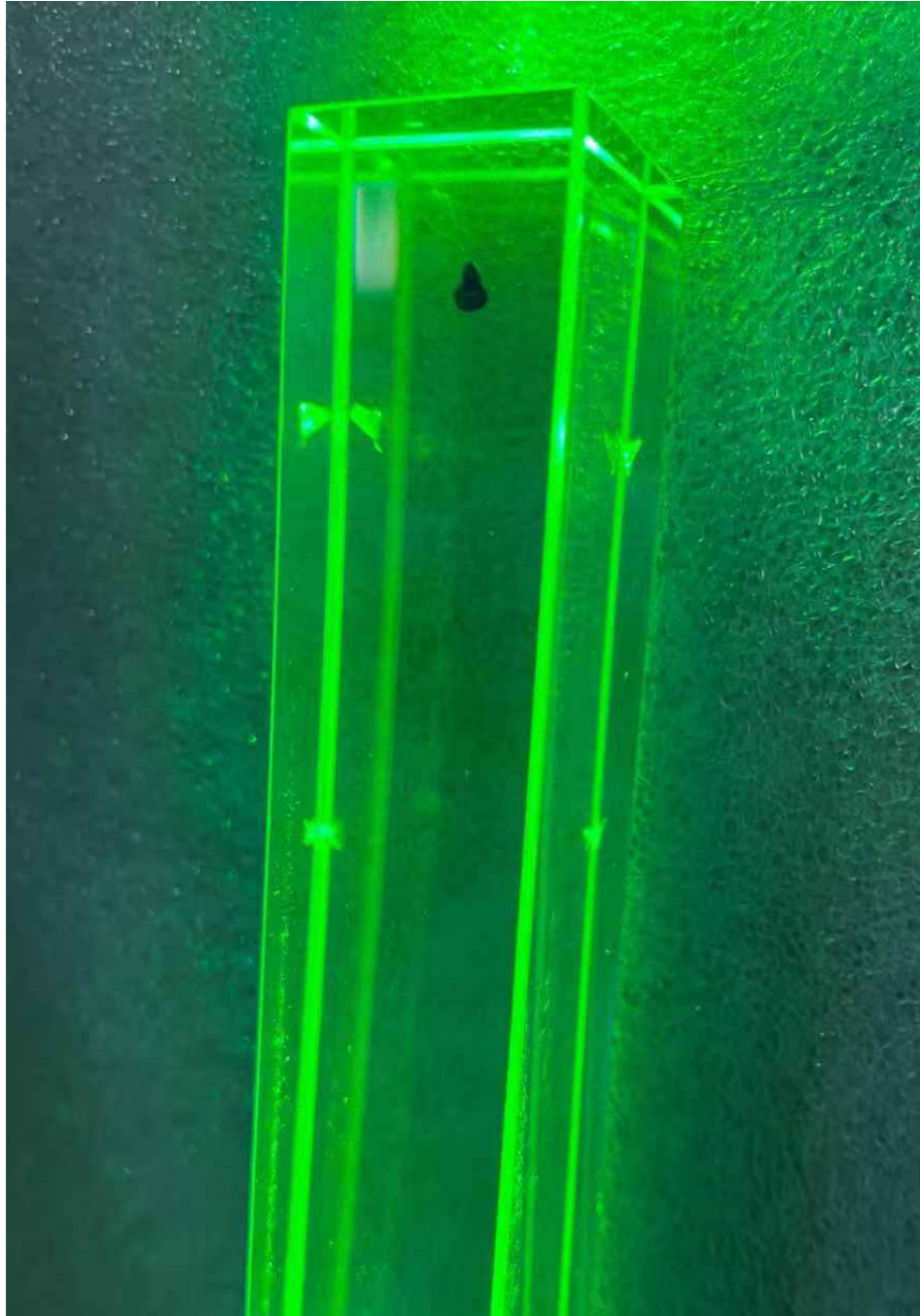


- Some points with green laser beam check

- Looks a little dark
- Passes Longitudinal Transmittance measurement

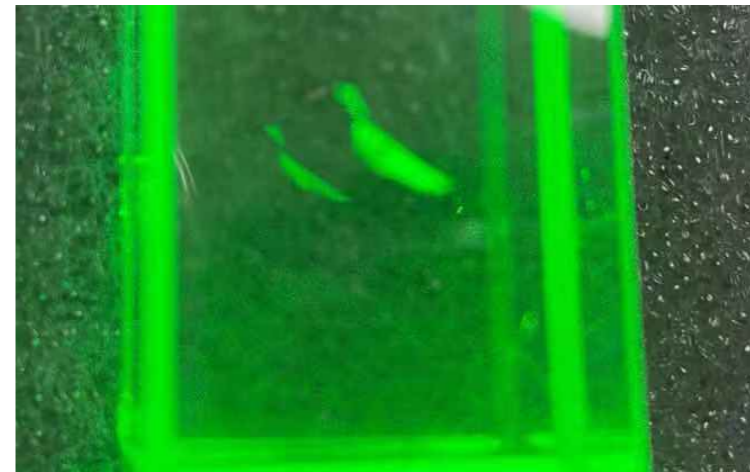
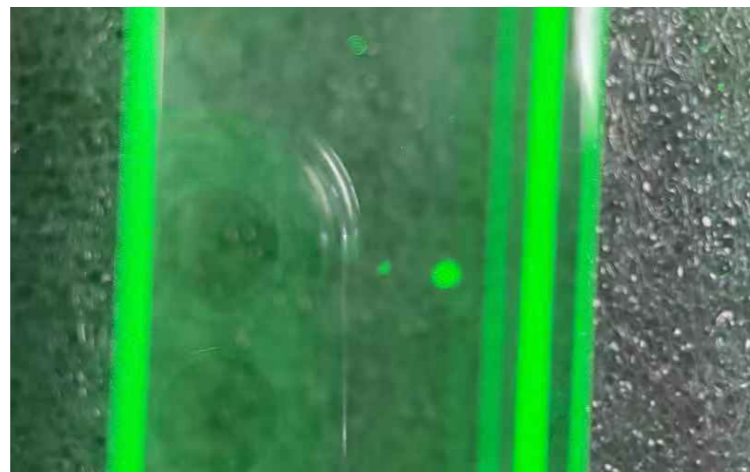
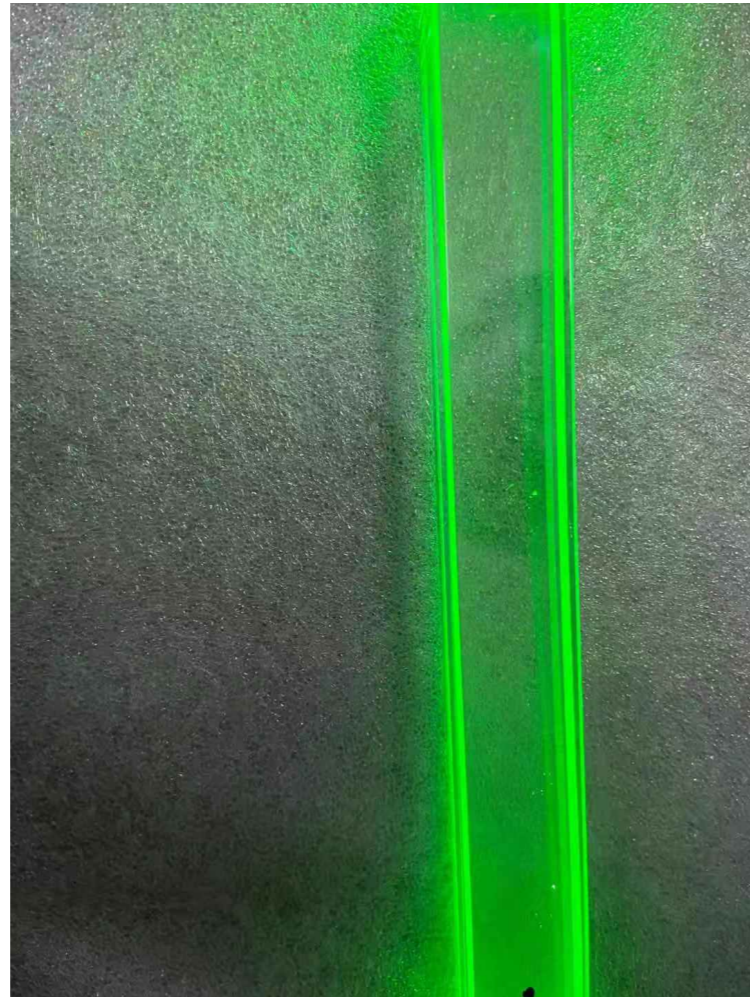
ID	T360	T420	T620
76	30.4	62.3	70.4
77?	32.7	59.0	70.4
78	30.7	64.6	72.7
79	26.1	61.0	73.5
80	29.3	60.3	69.9

82 ?



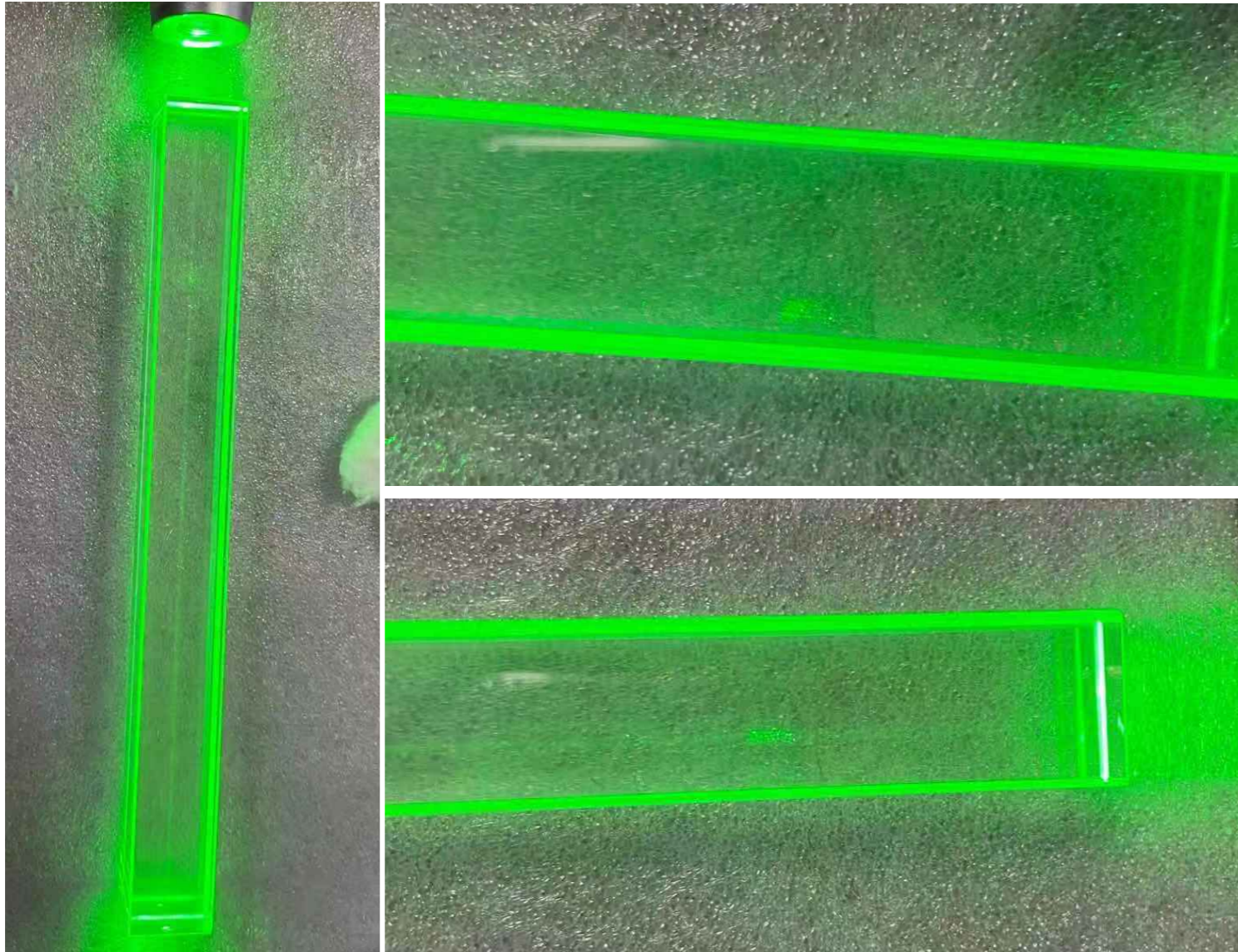
- There are some chips and flaws.

83 ?



- **There are some chips and flaws.**

86 ?



- Looks like chemical films

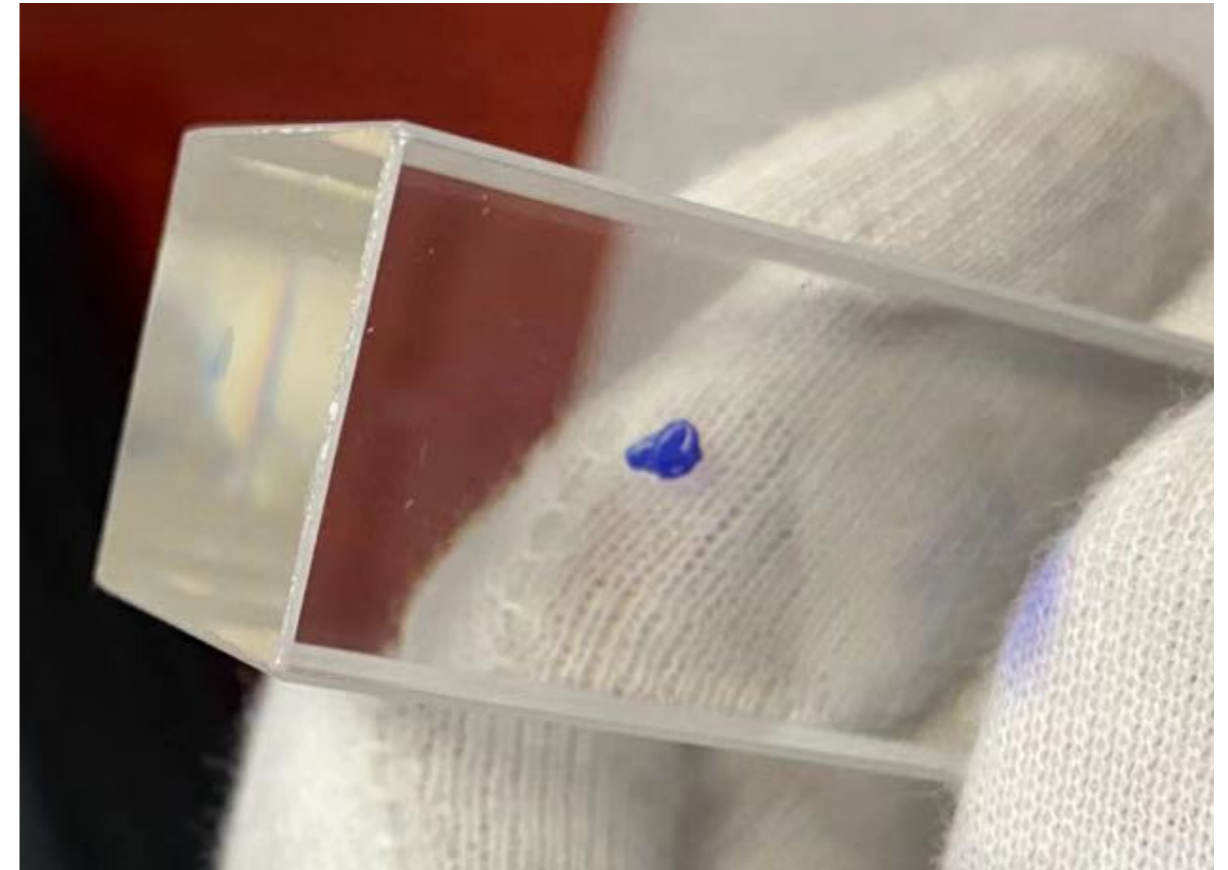
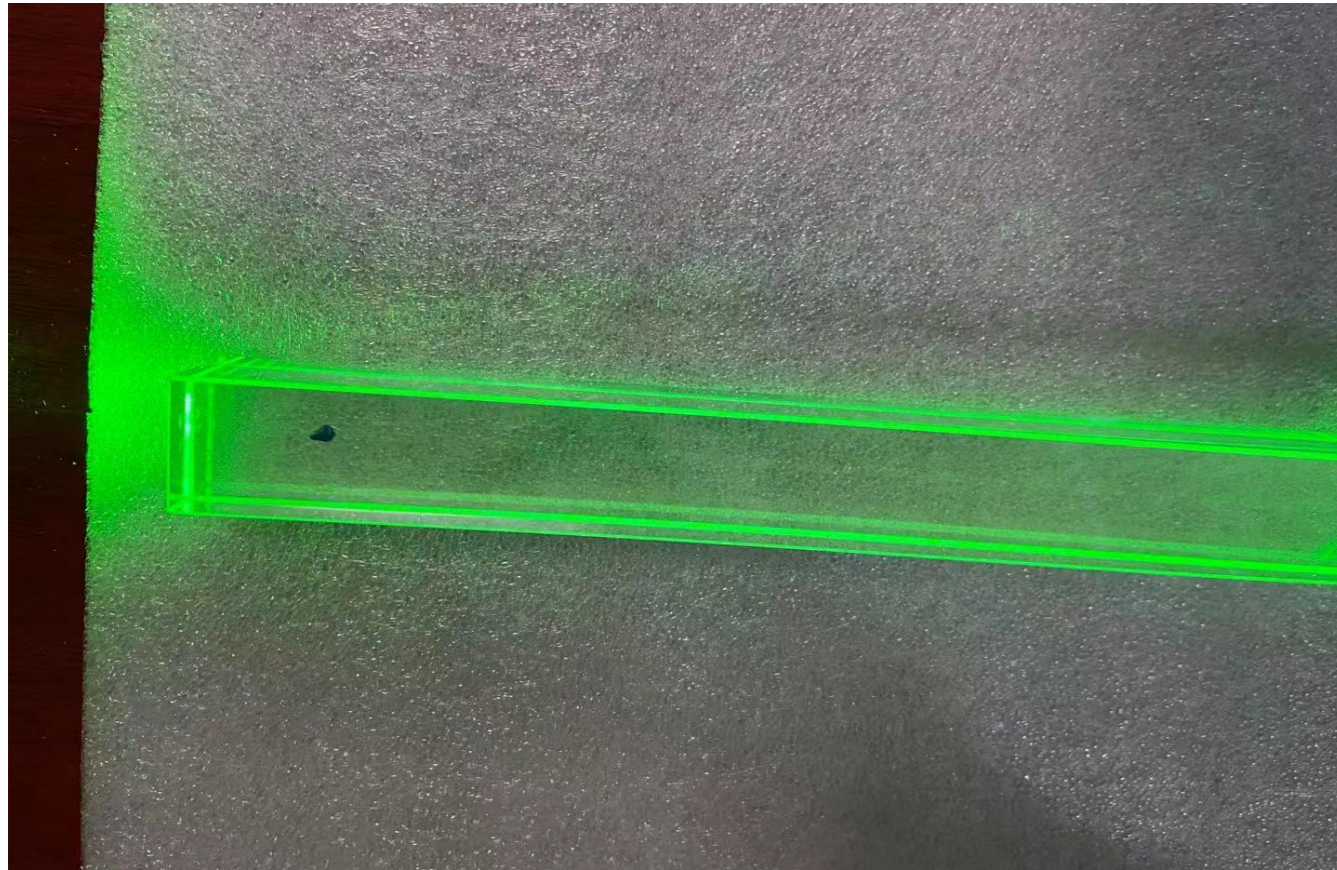
- Some points with green laser beam check

93 ?



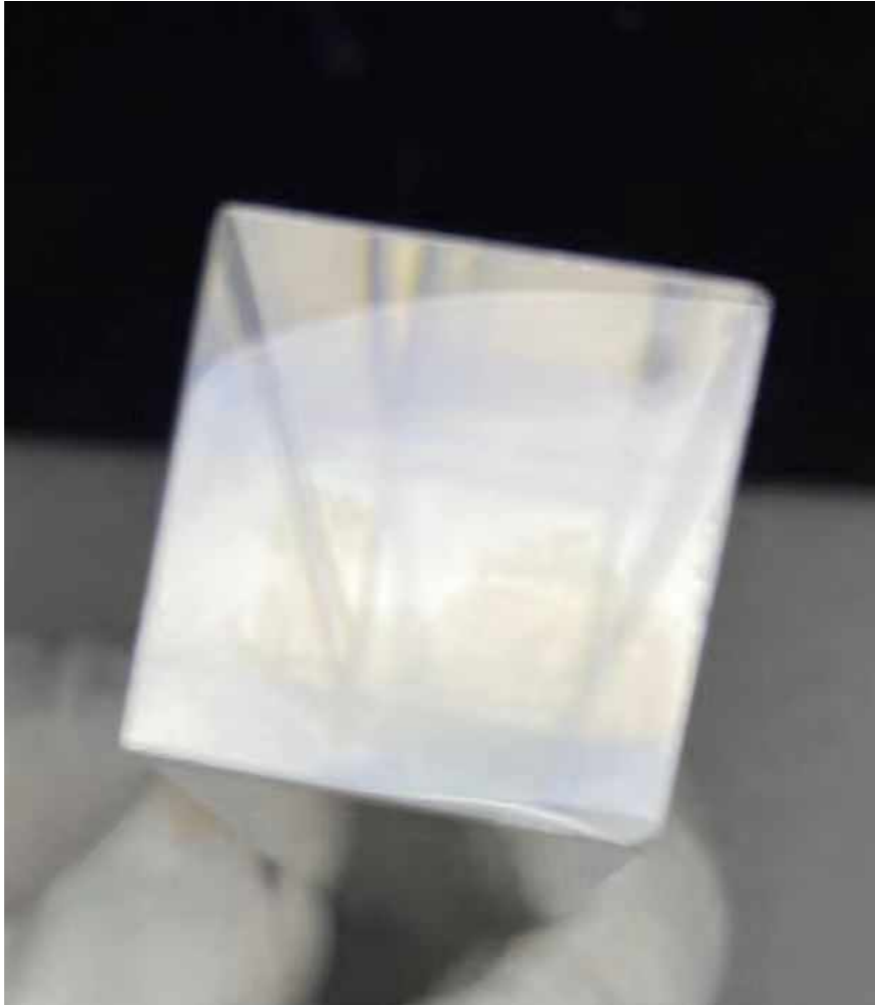
- **A little black points on the surface**

104 ?



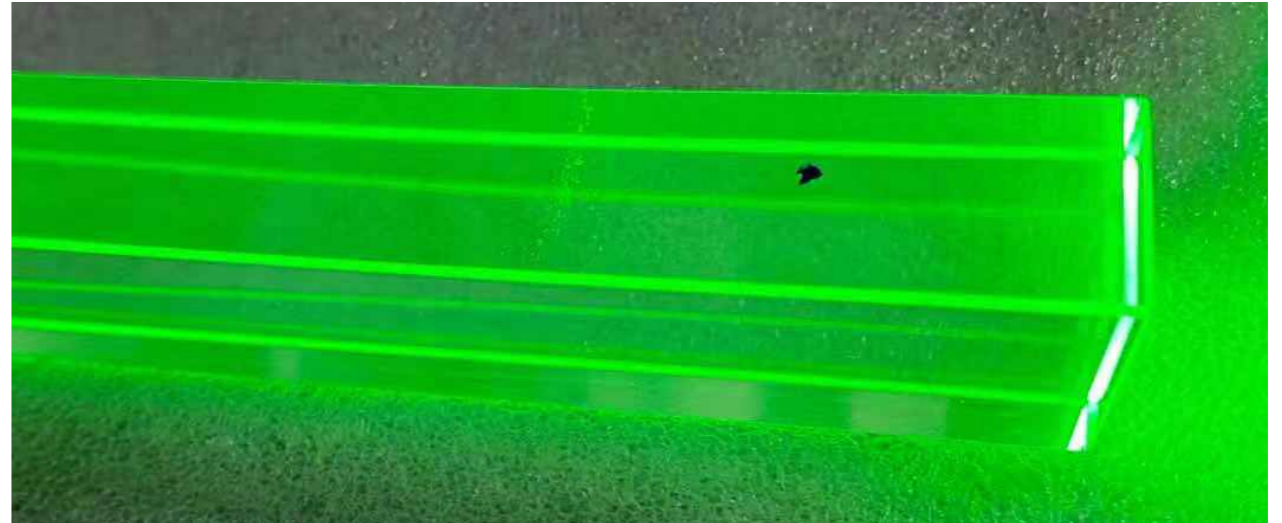
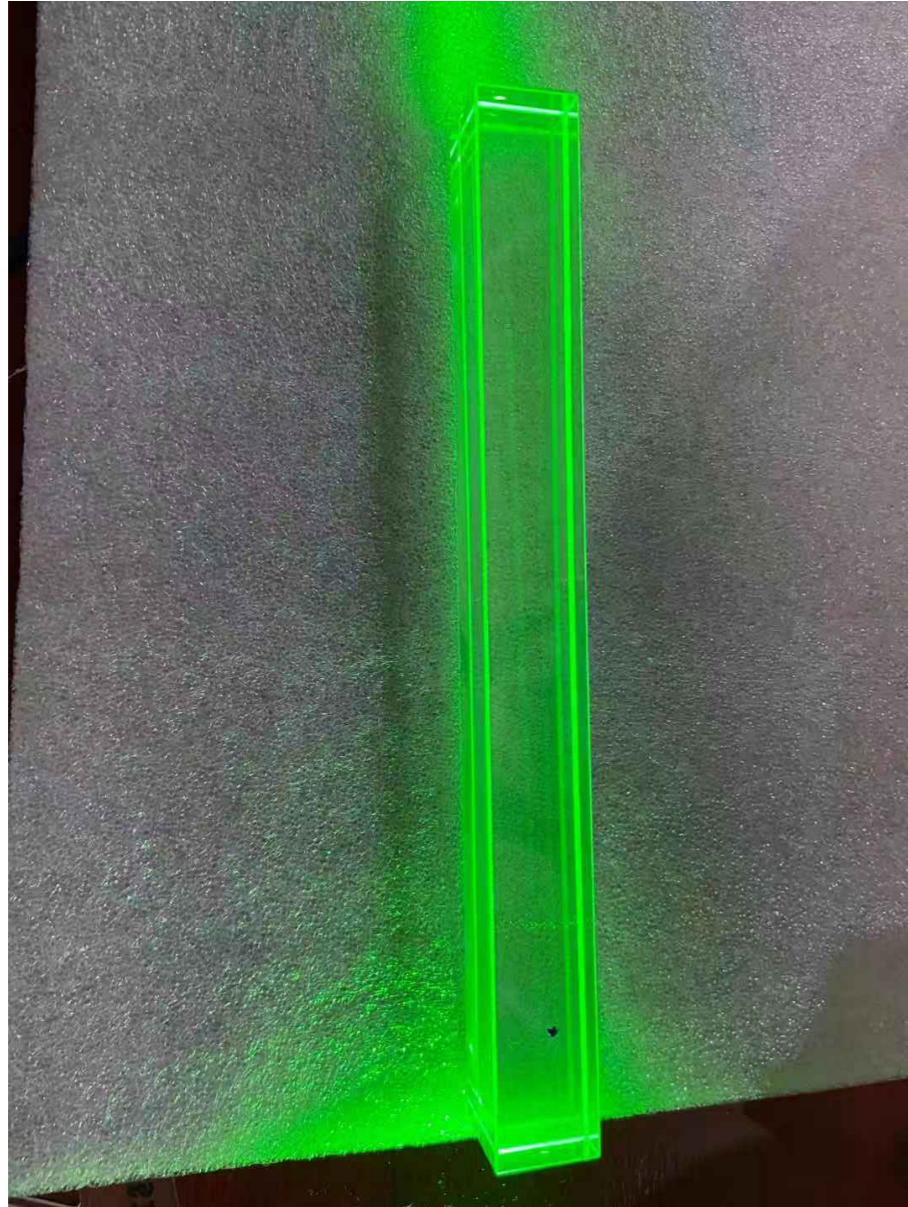
- **Something on the surface of the crystal.**

111 ?



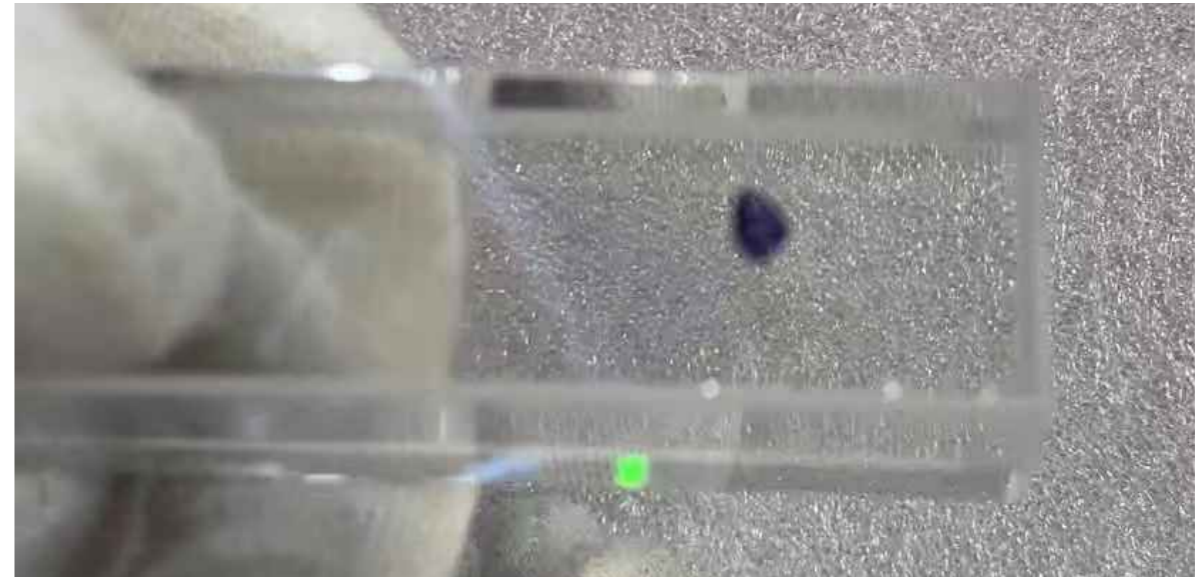
- **Something on the surface of the crystal.**

113 ?



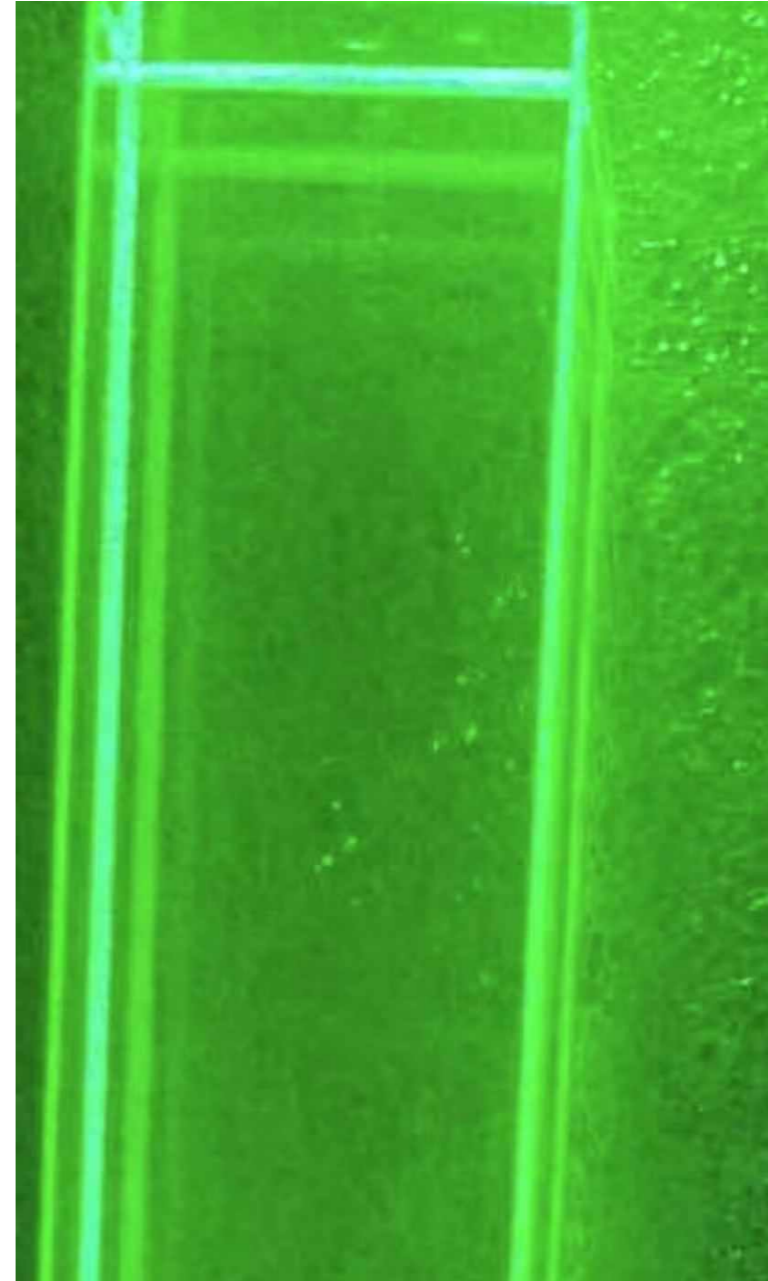
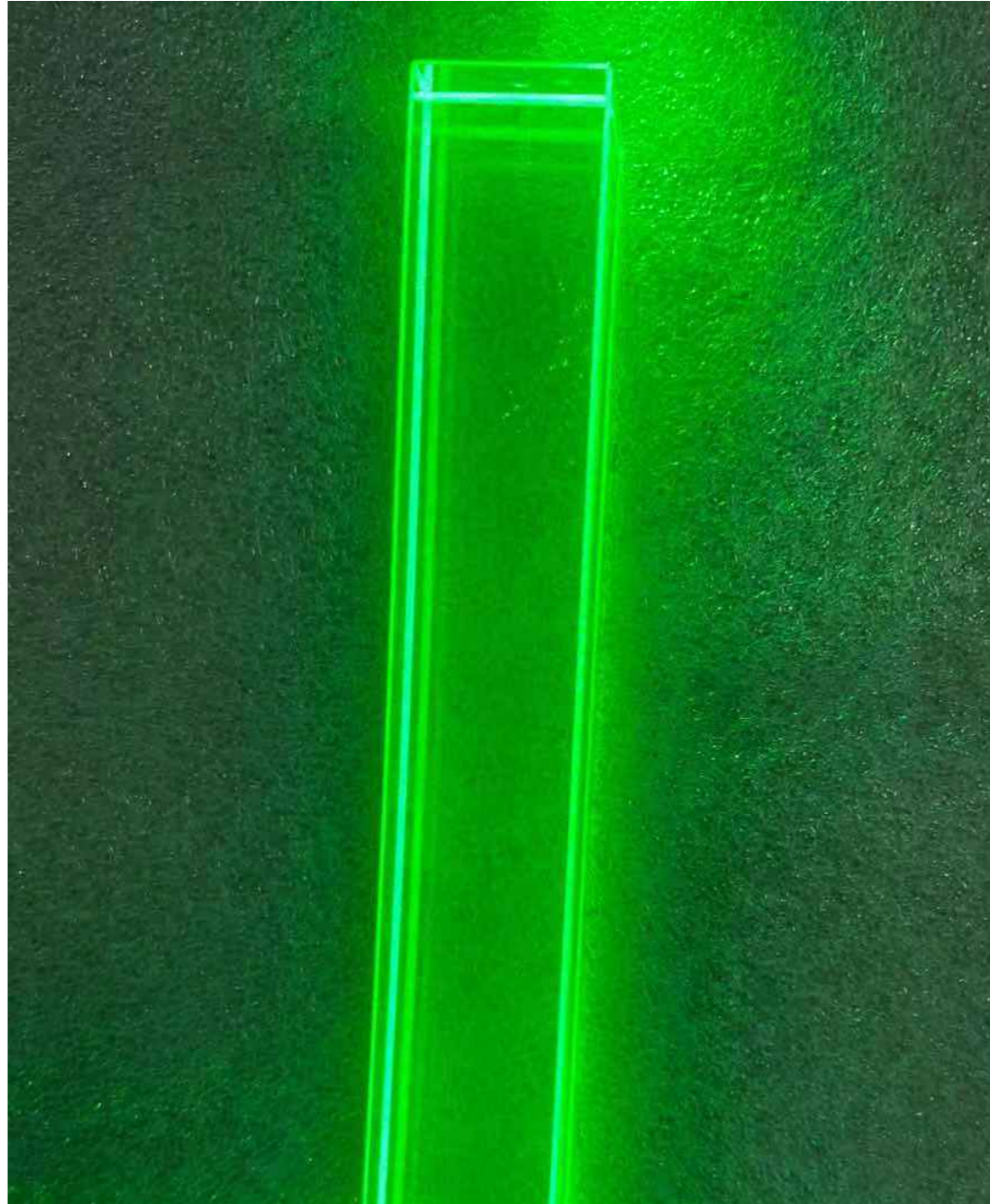
- **Some points with green laser beam check**

120 ?



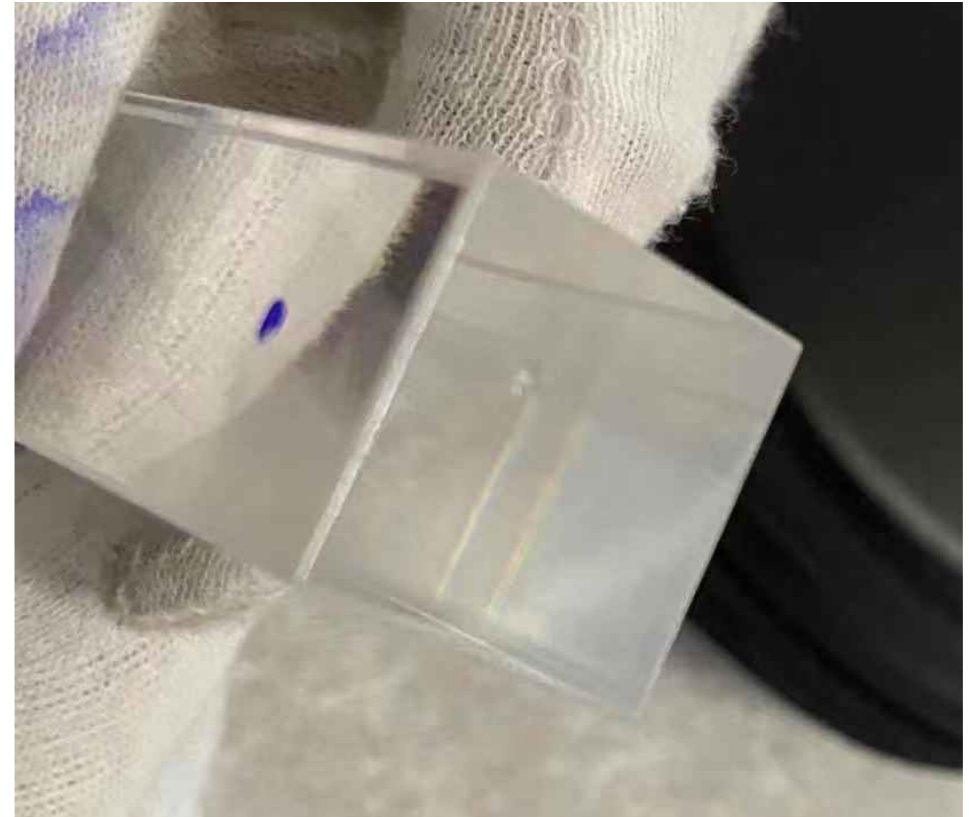
- **Small chips**
- **Rough edge**

122 ?



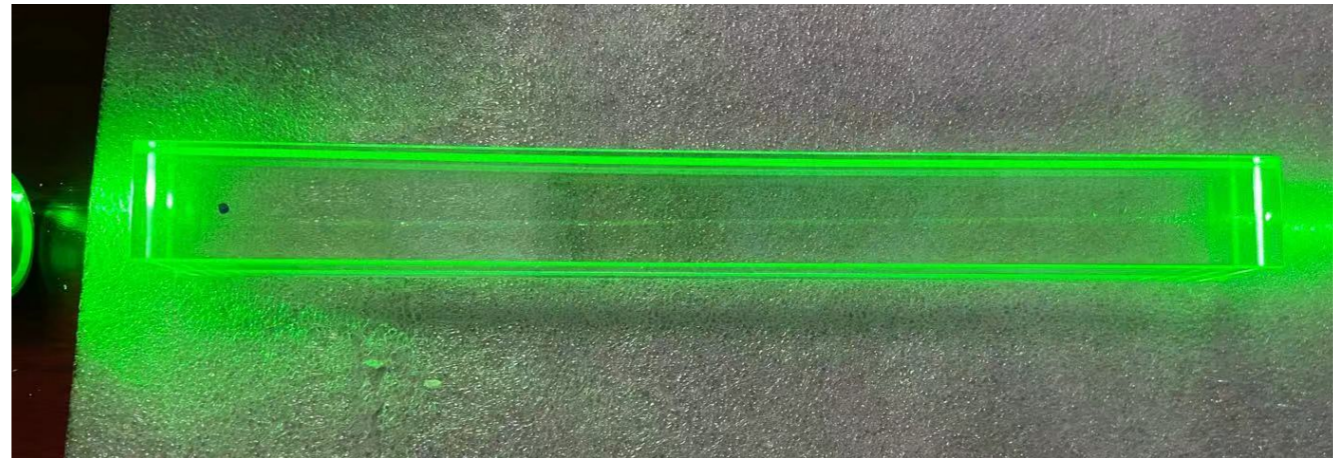
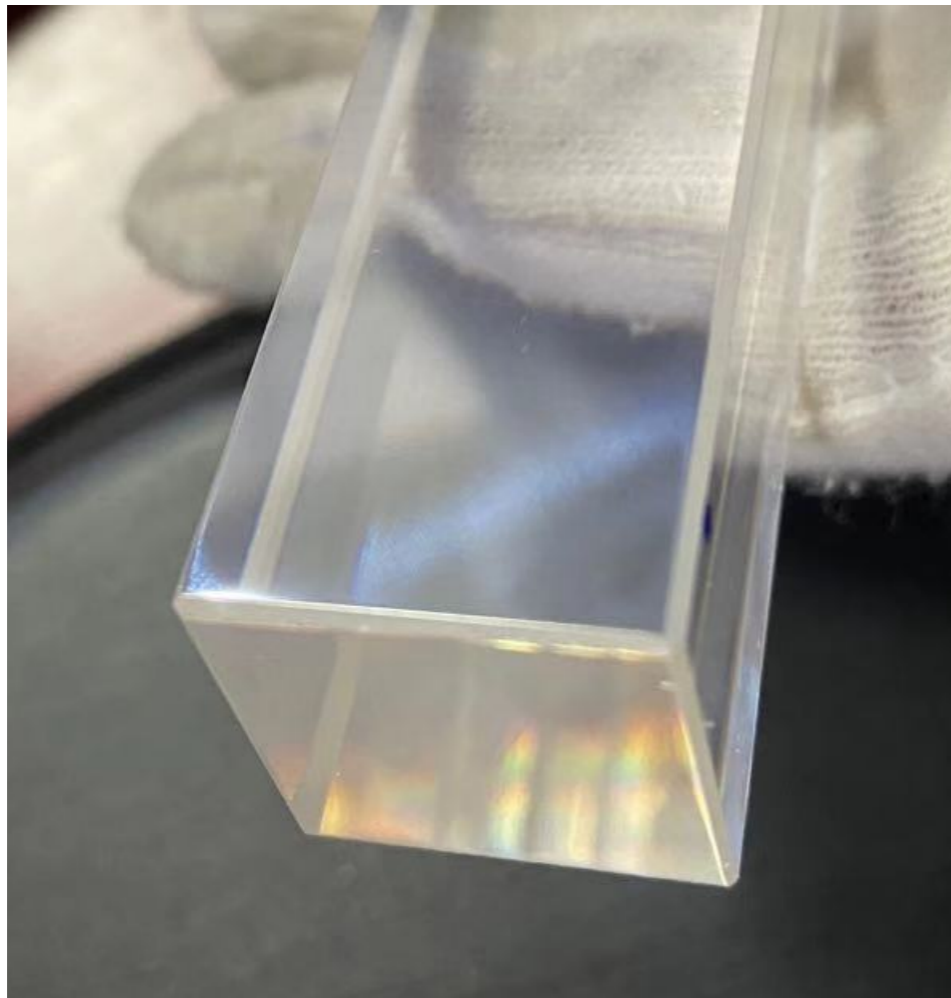
- Some points with green laser beam check

124 ?



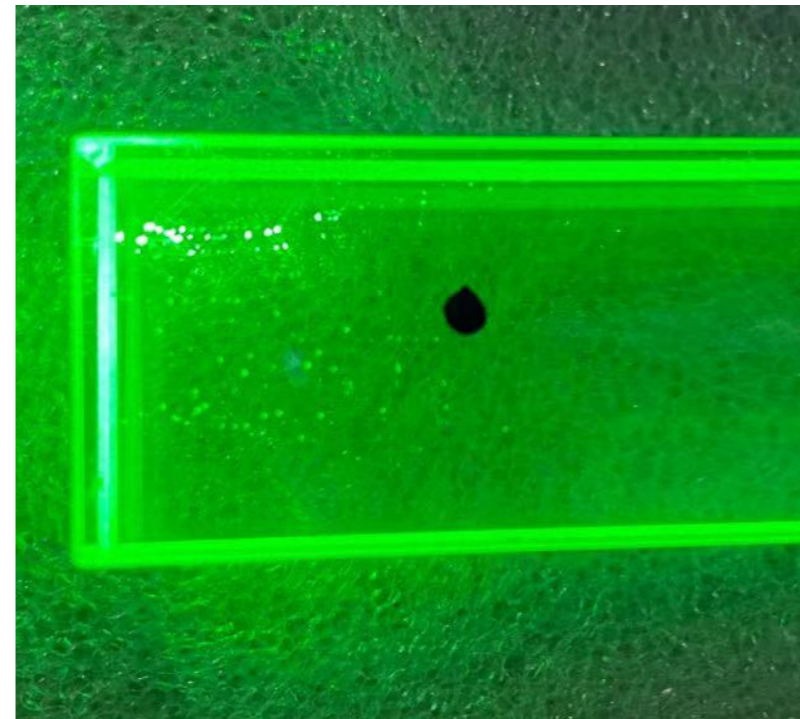
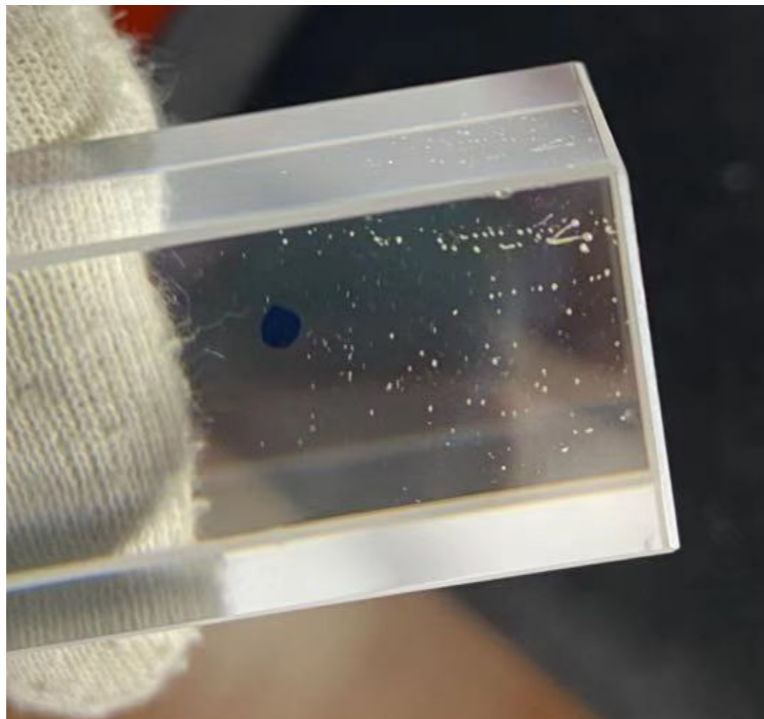
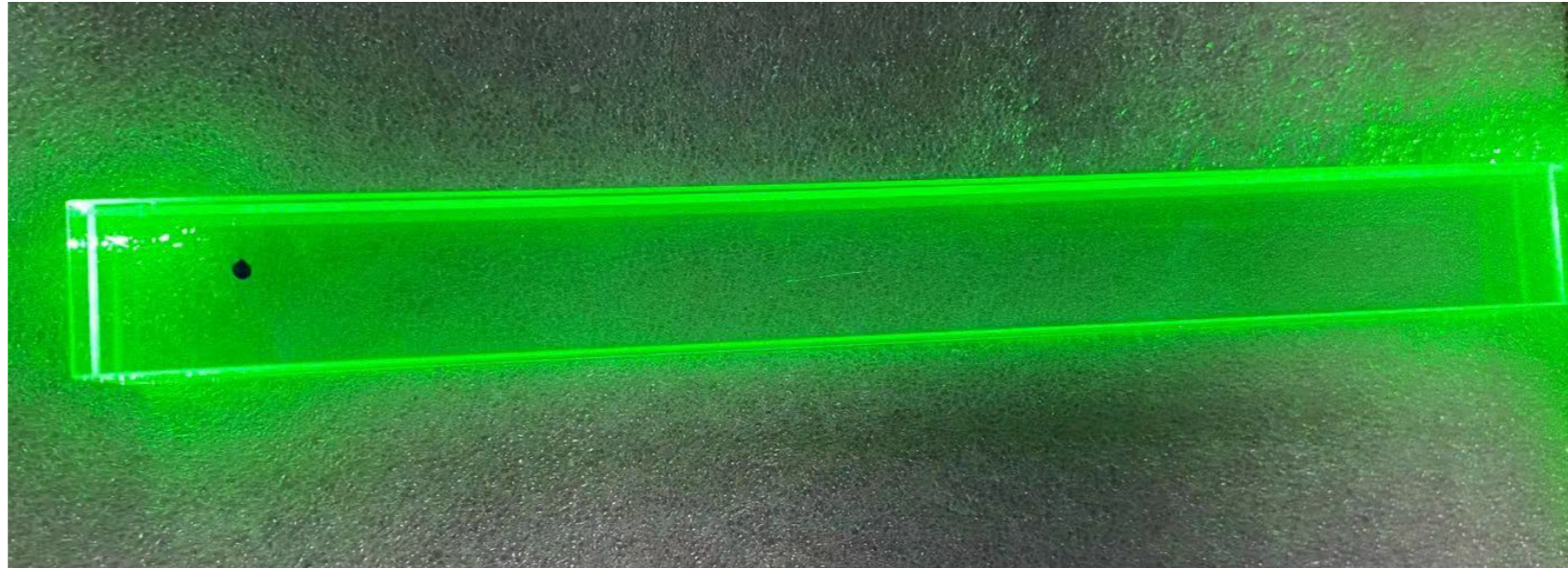
- **One long scratch on one surface**
- **Two on the up-side (with PMT)**

130 ?



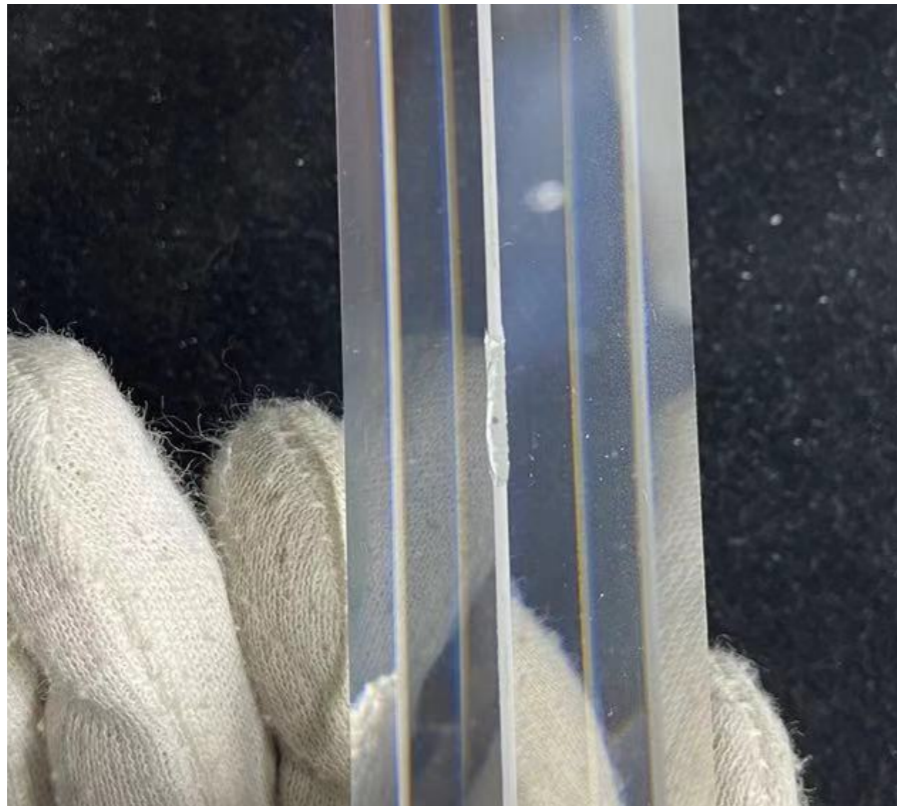
- **Rough edge**
- **with green laser beam check**

131 ?

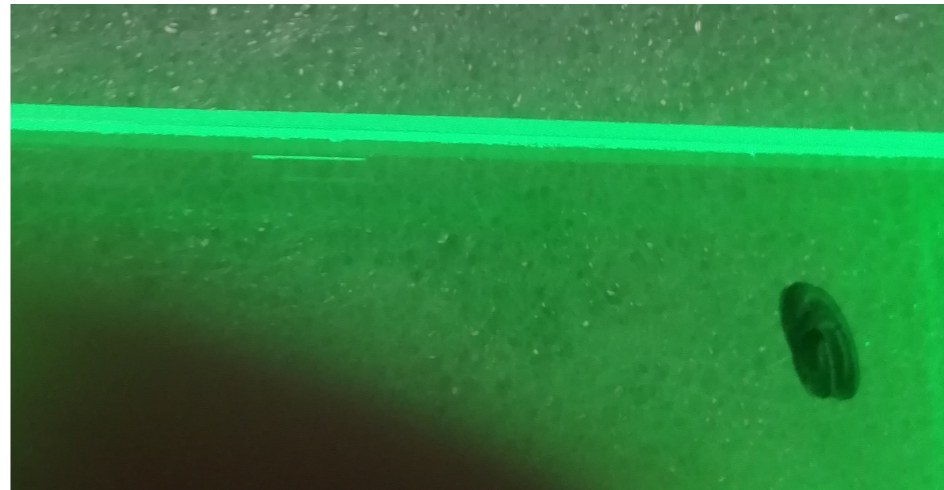


- **Flaws inside the crystal which can also be seen by the green laser beam check**

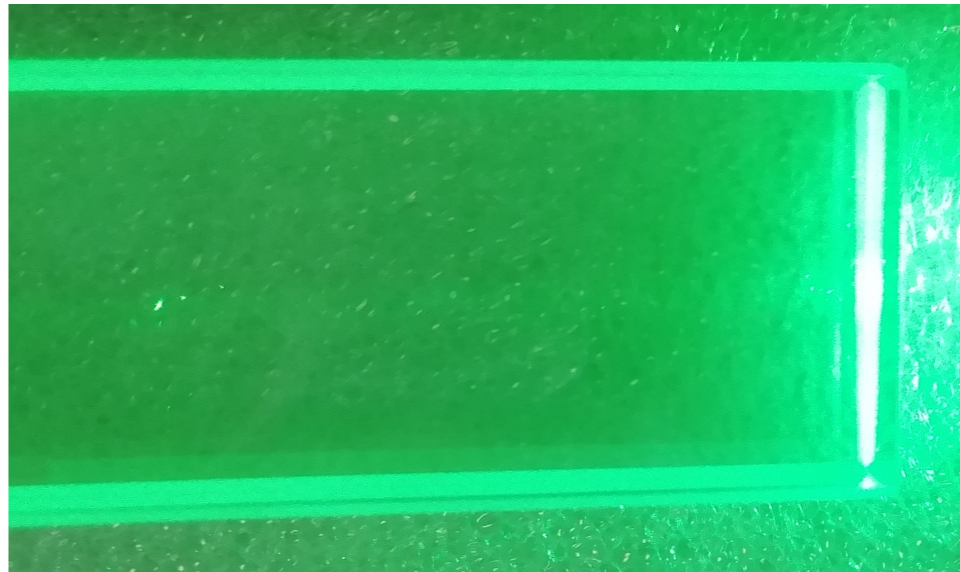
134 ?



- **A long chip on an edge**

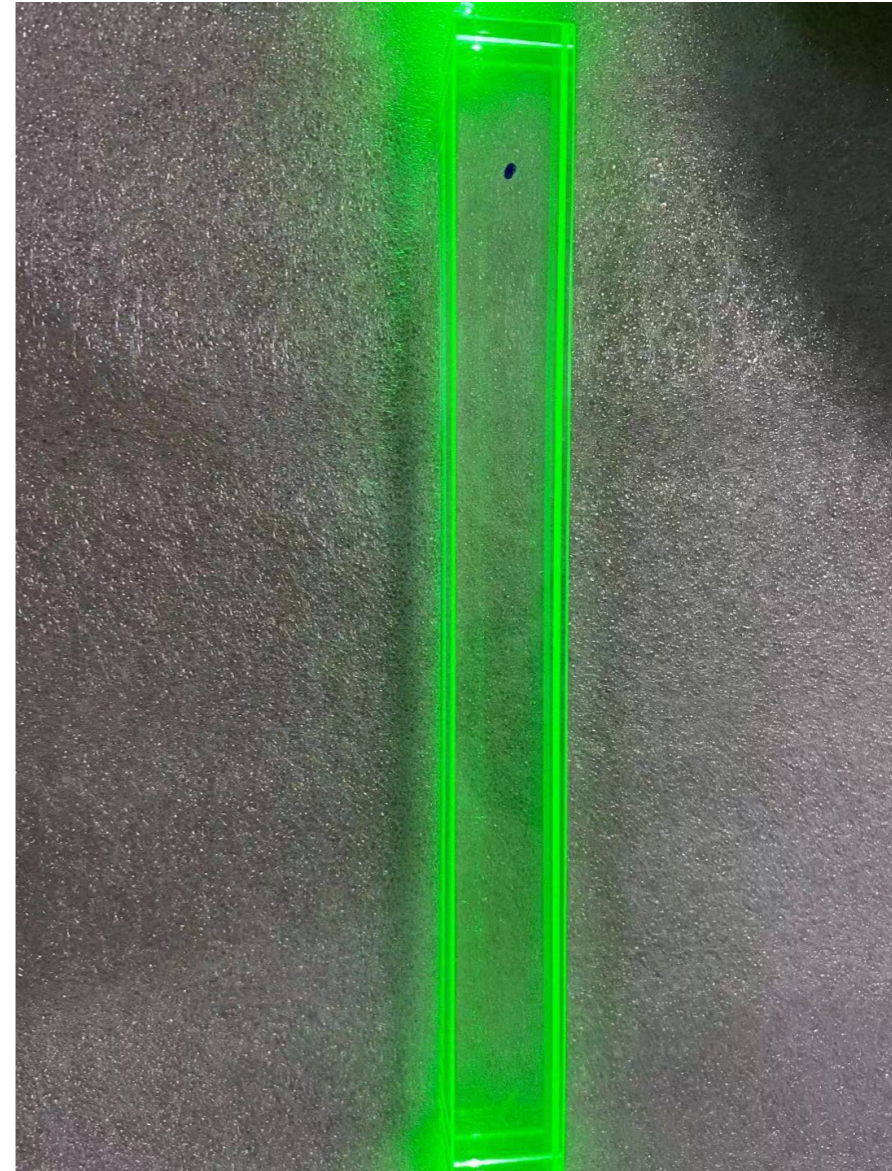
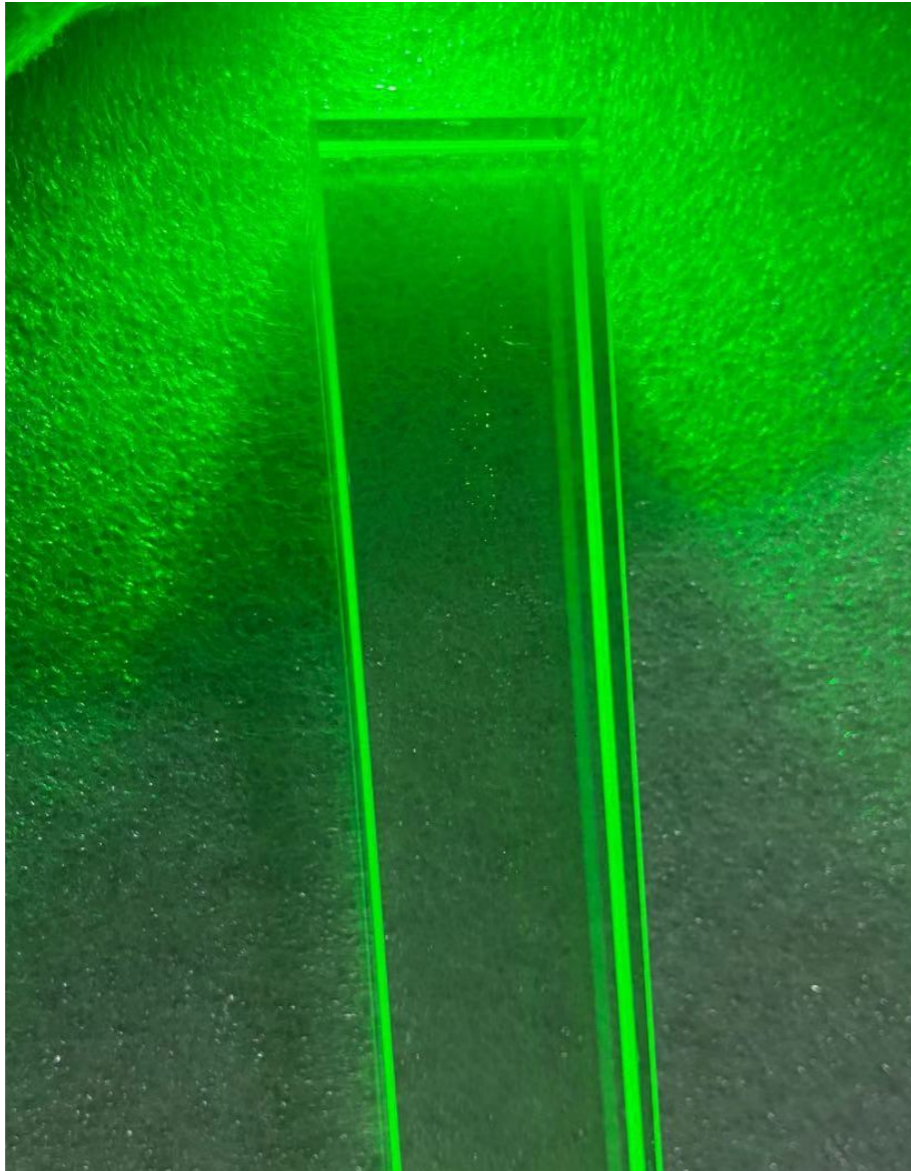


- **A scratch on surface**



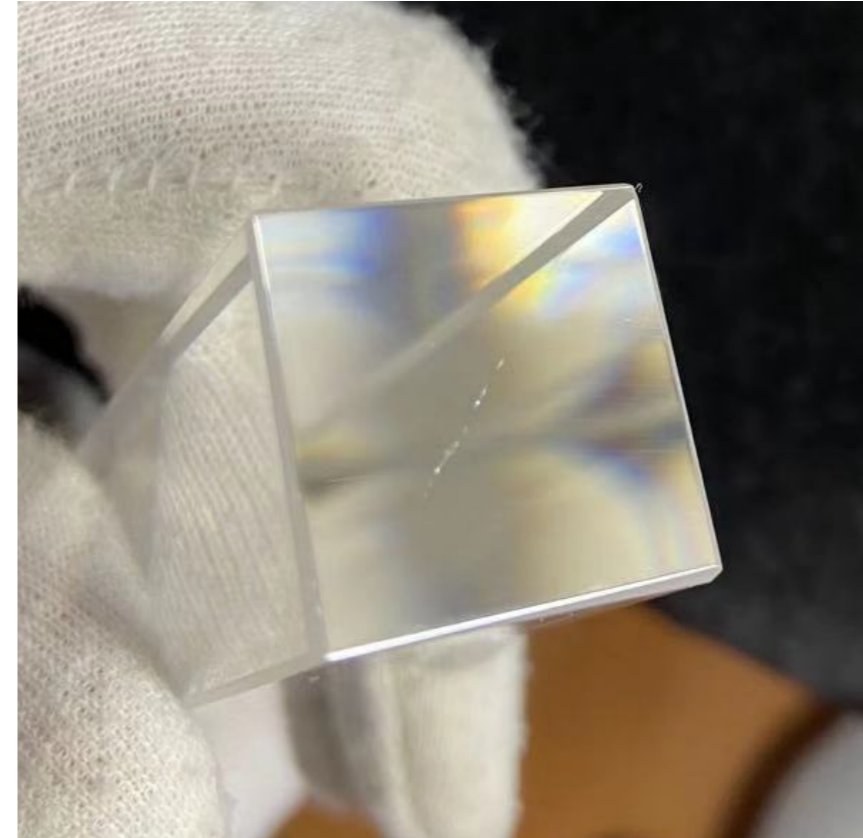
- **Something small inside**

135 ?



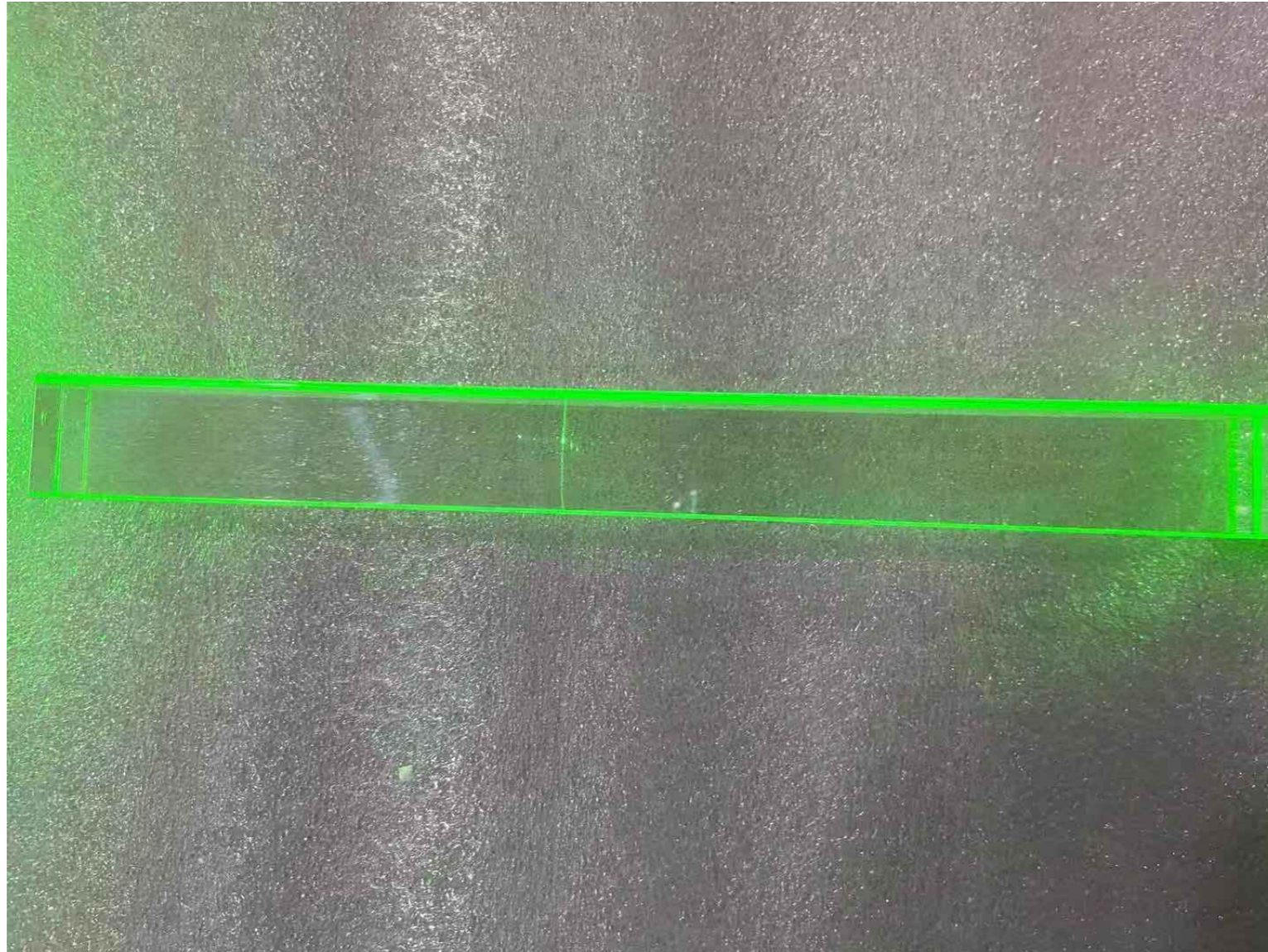
- **Some points with green laser beam check**

149 ?



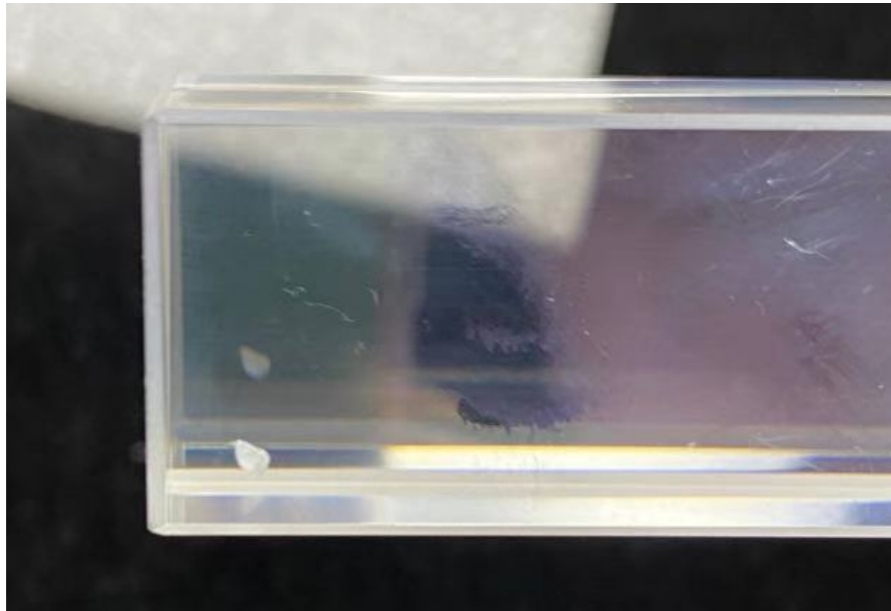
- **A long scratch on surface**
- **A scratch on the up-side of the crystal (with PMT)**

155 ?



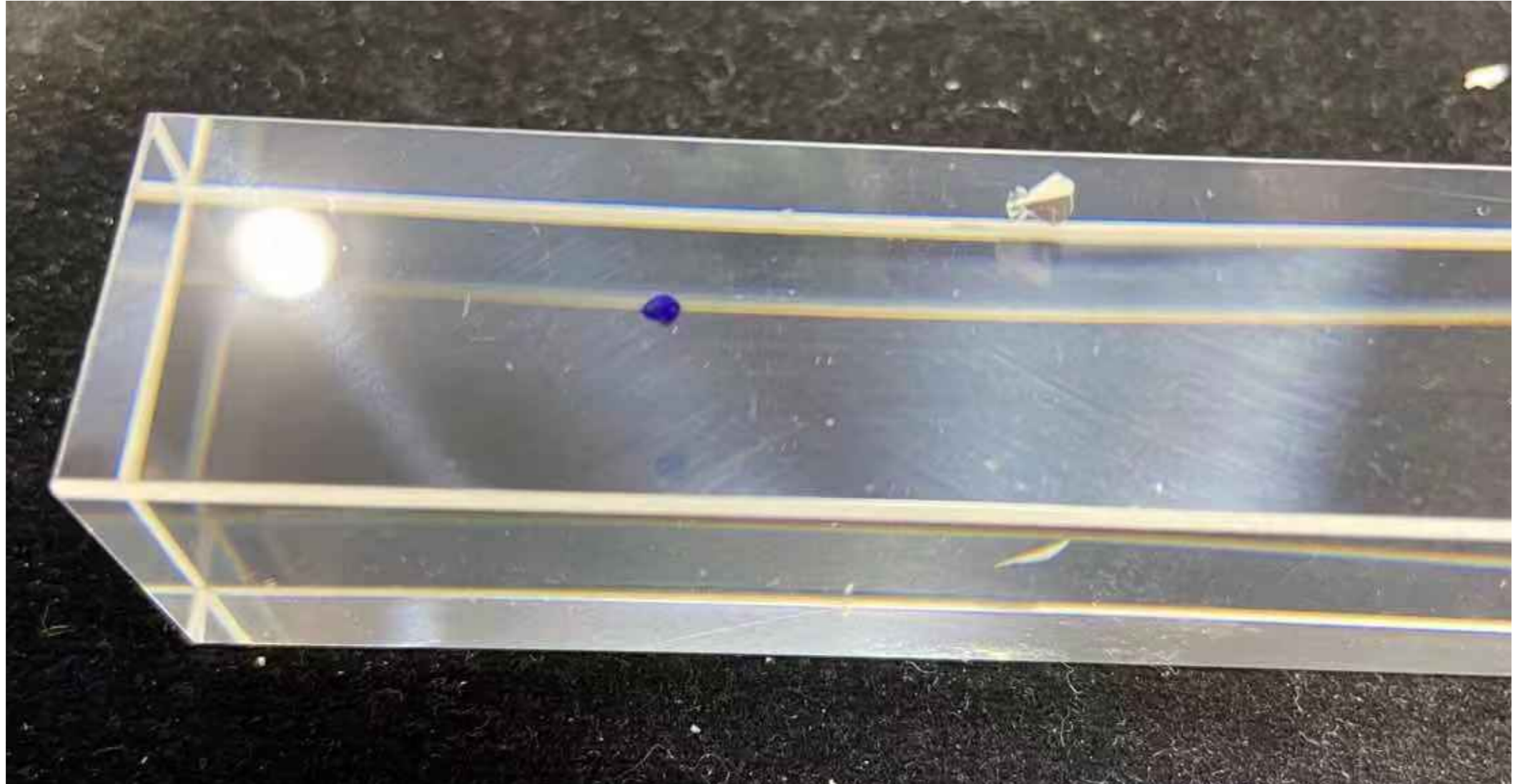
- **A layer with green laser beam check**

157 ?



- A small label on one surface
- Scratches on the surfaces

171 ?



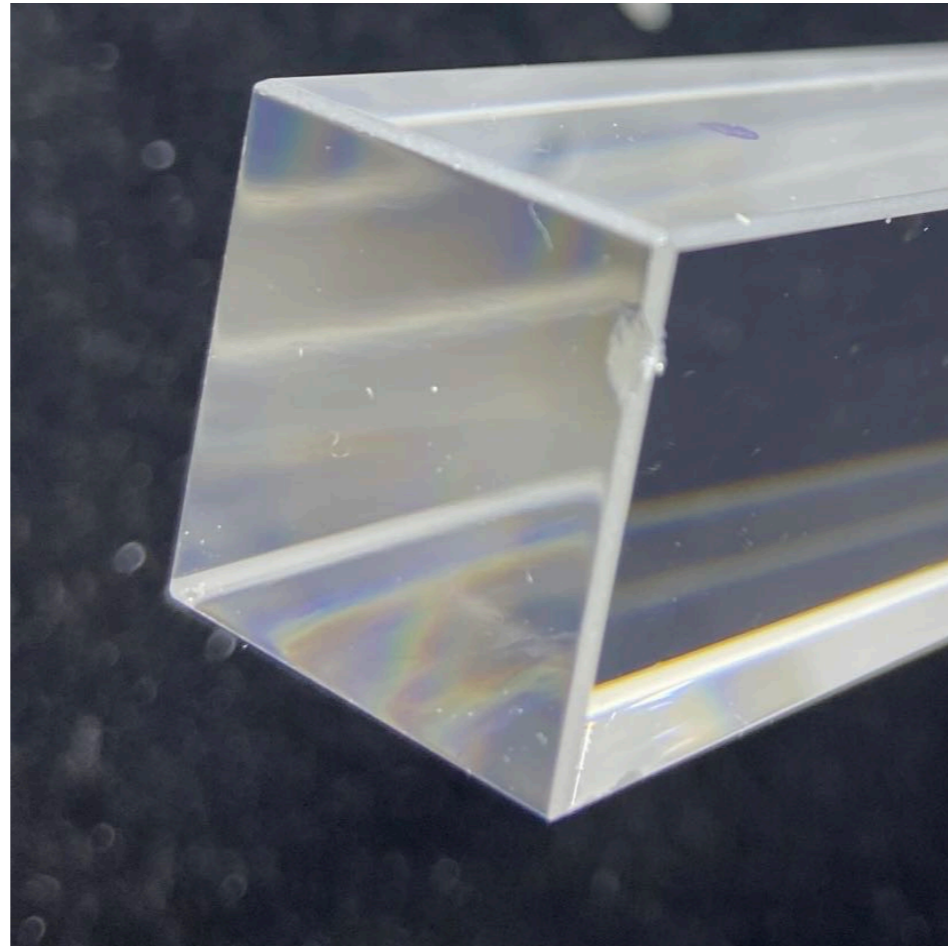
- **Chip and flaw**

178 ?



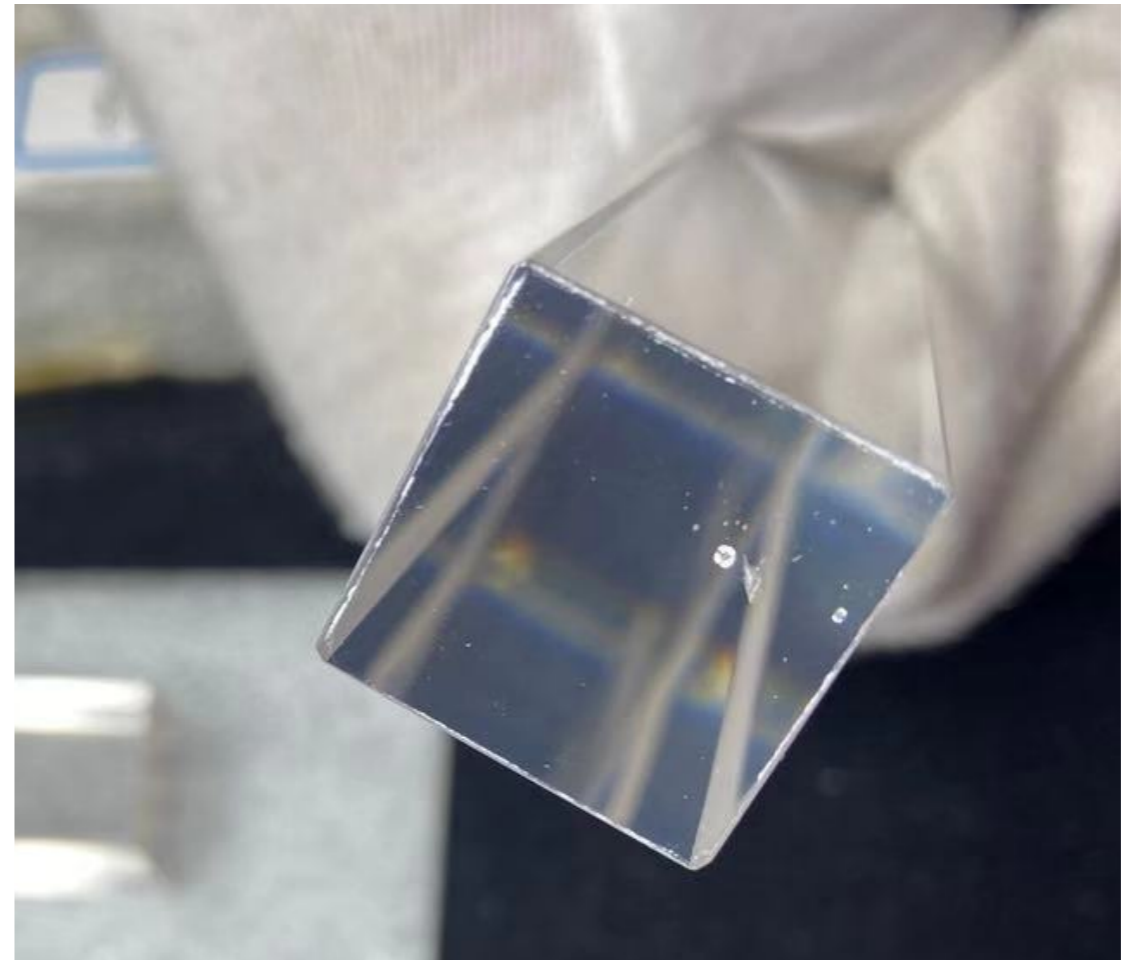
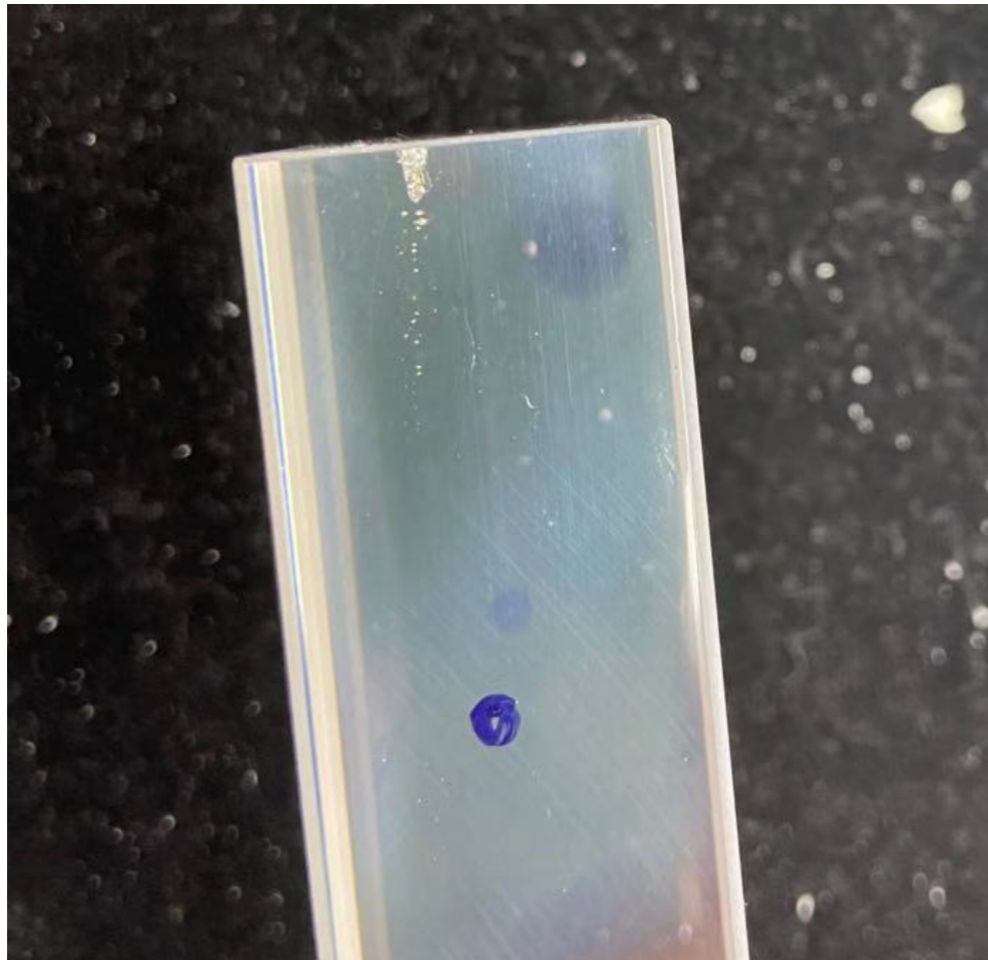
- **A flaw inside**

190 ?



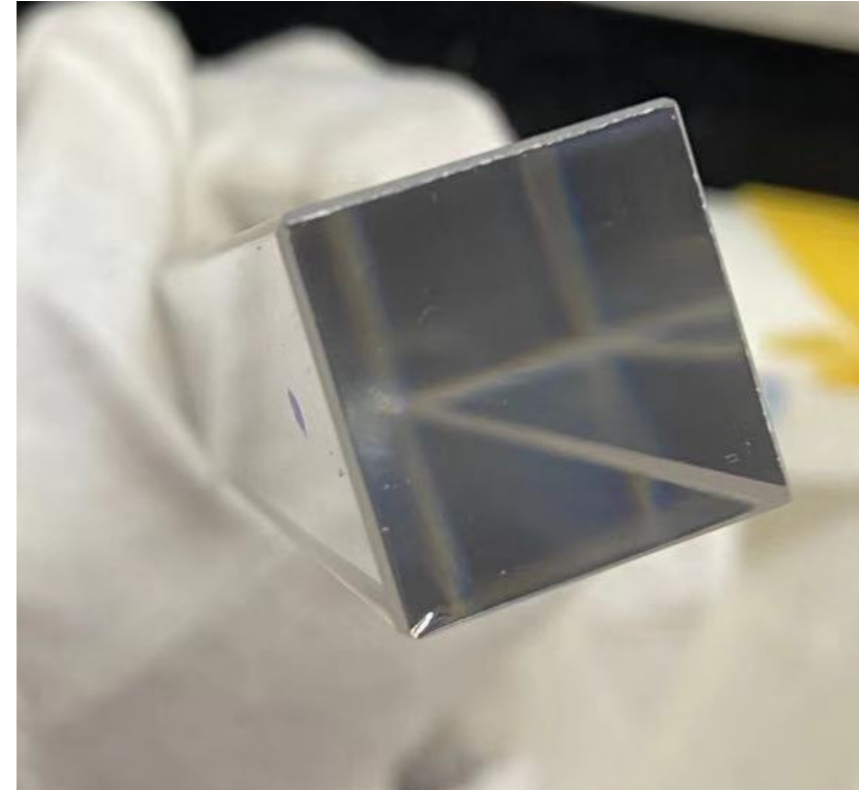
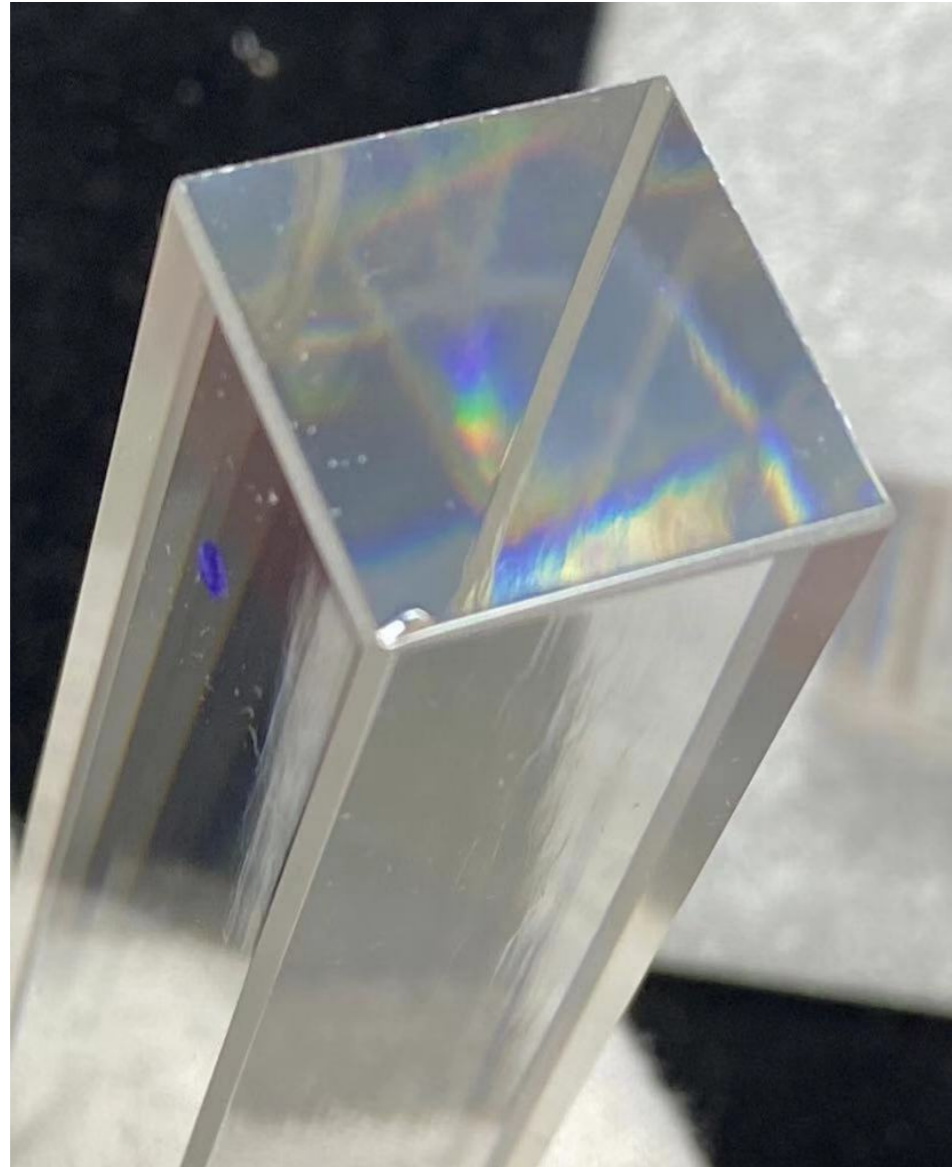
- **Chip on the up-side of the crystal (with PMT)**

215 ?



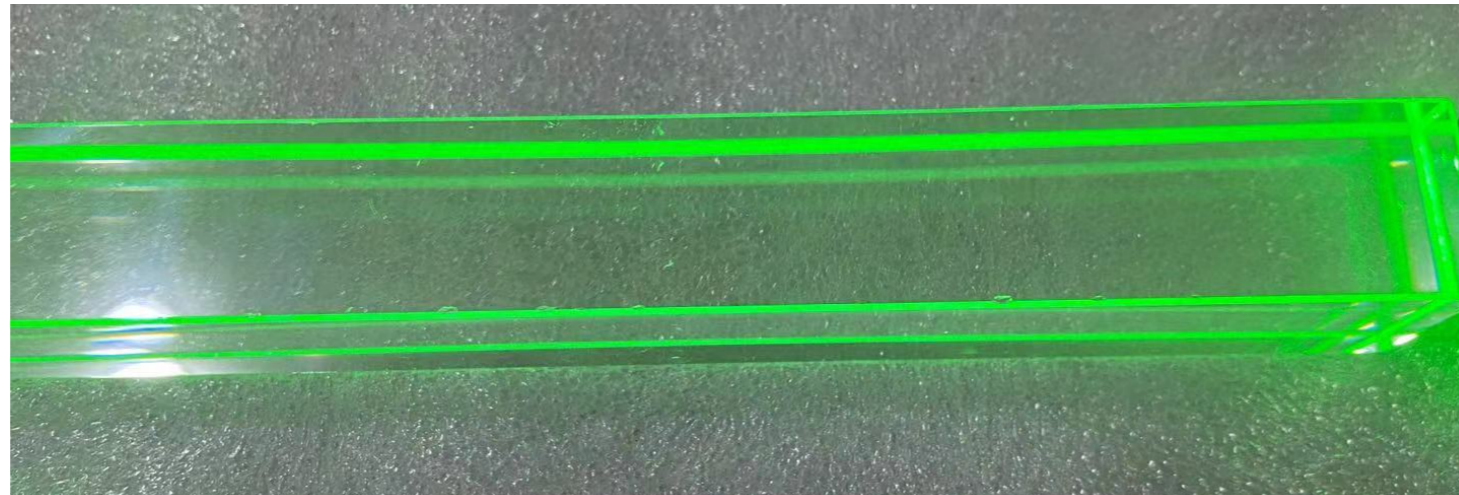
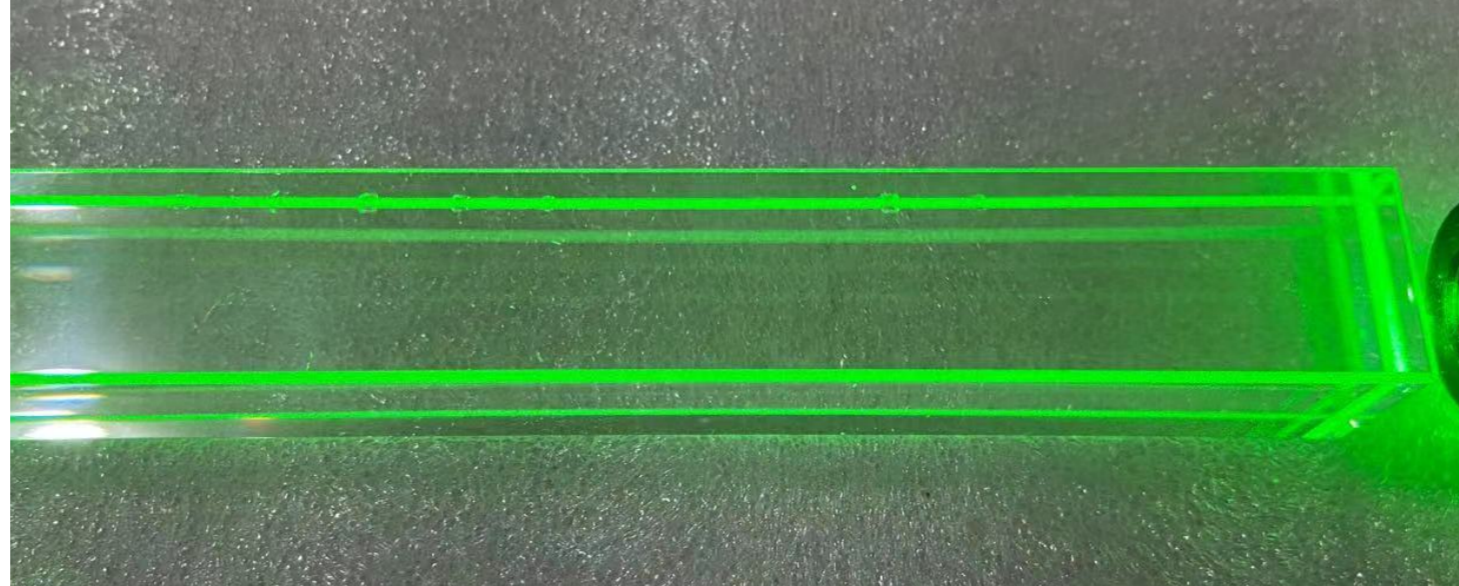
- **Flaw on the up-side of the crystal (with PMT) which goes to inside of the crystal**

220 ?



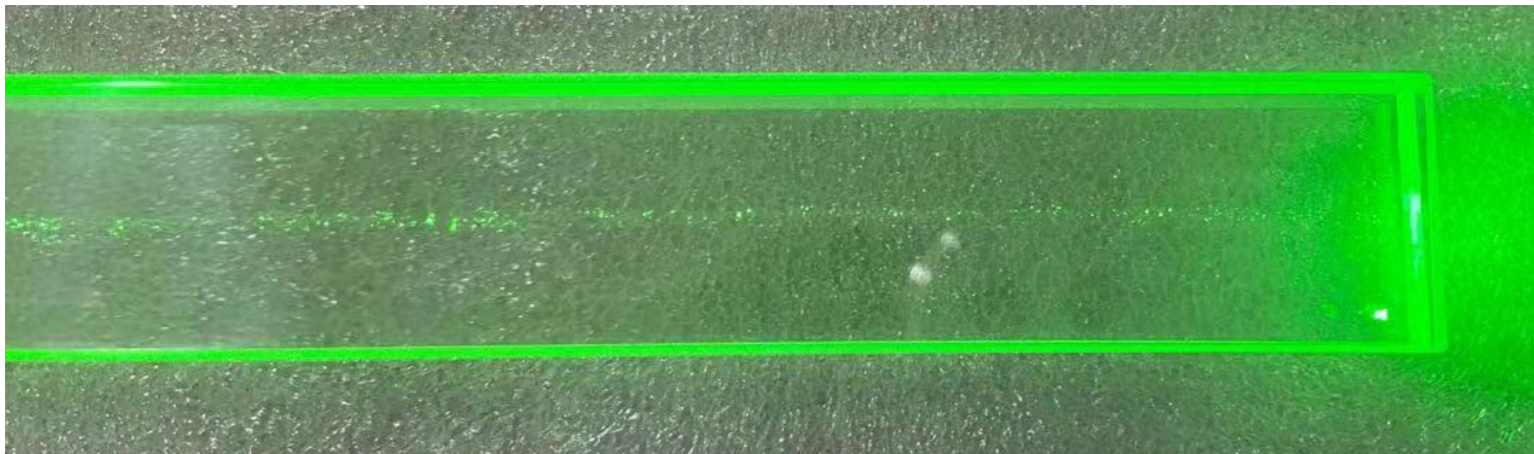
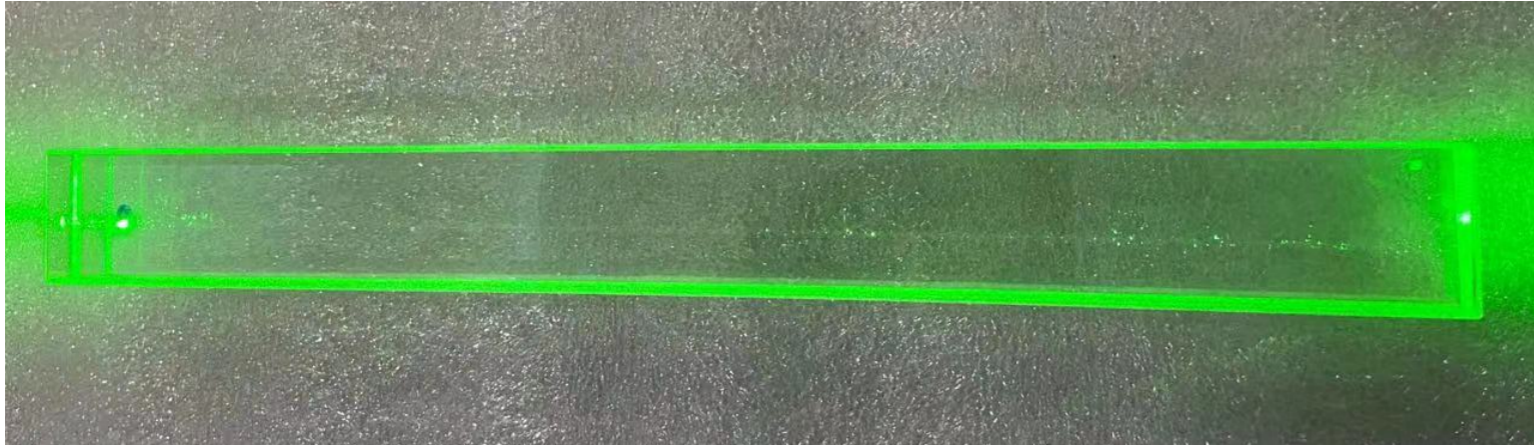
- **Small chip on the up-side of the crystal (with PMT)**

223 ?



- **Chips on the Edges of the crystal (with PMT)**
- **About eleven small chips on one of the edges**

224 ?



- **Scattering is not very uniform**
- **Flaw near the down-side of the crystal**