Scintillator Test
&
Reflective Material Test

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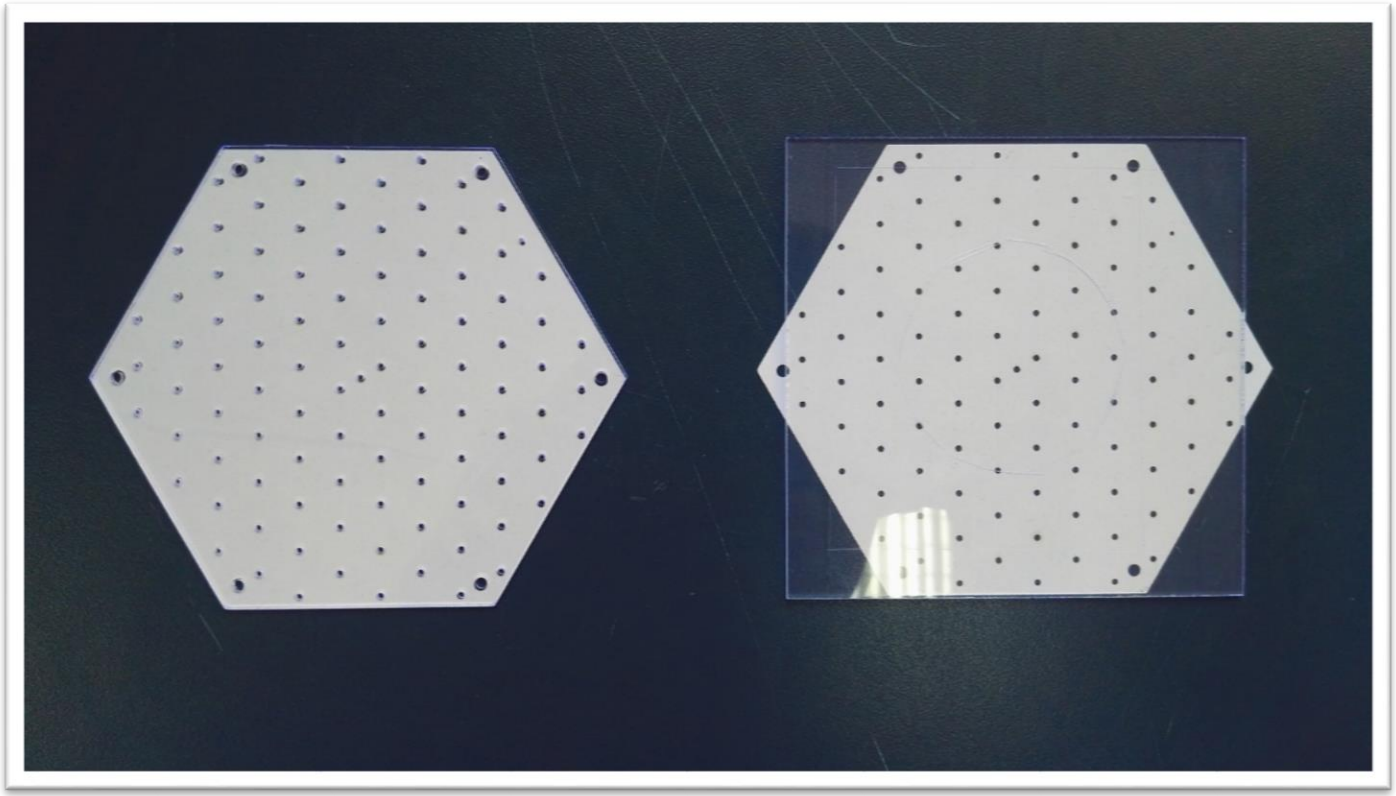
2016.3.31

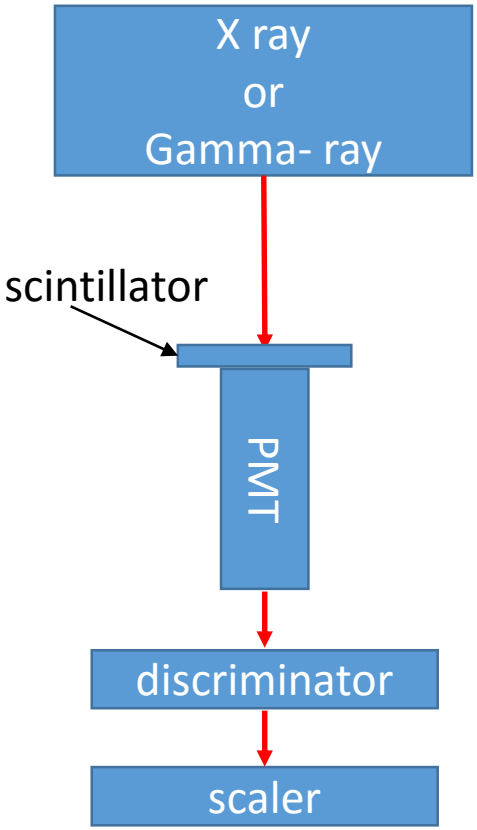
1. Scintillator Test



Kedi *Another company*

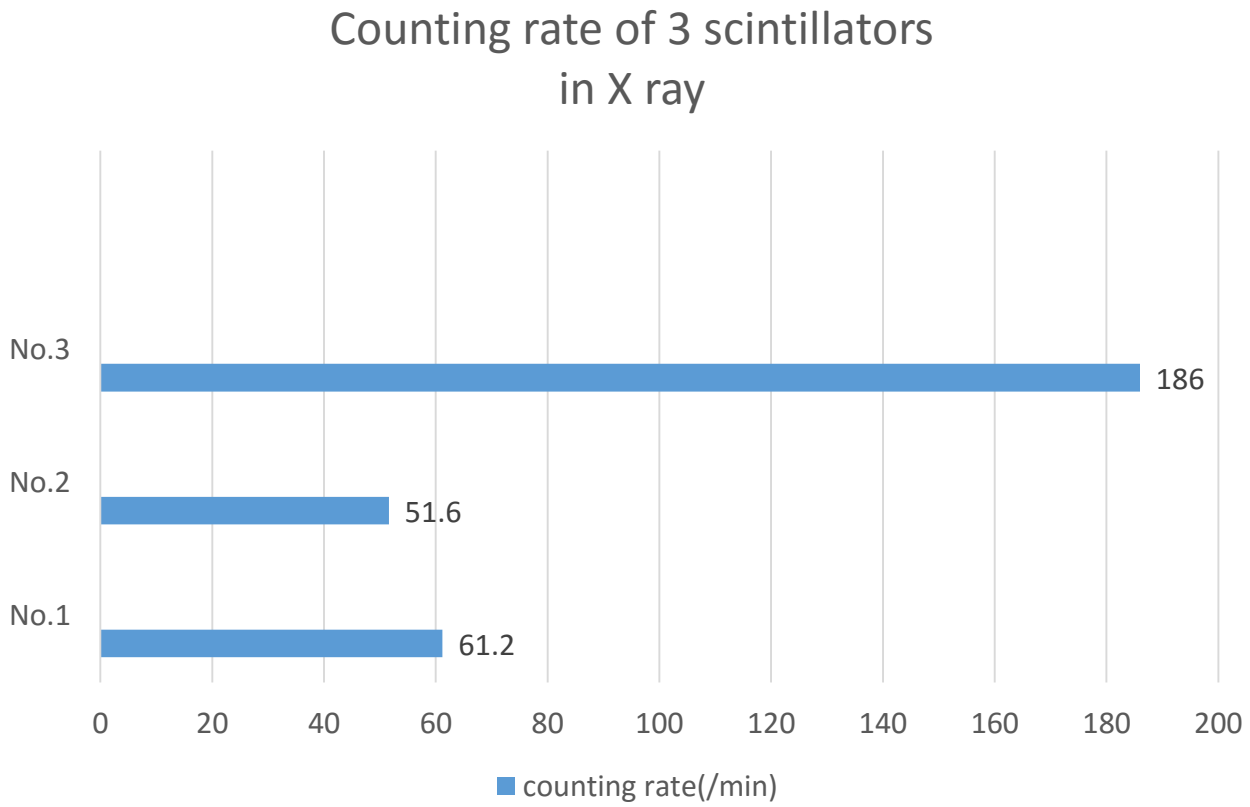
We have 3 kind of scintillators. No.1 and No.2 are made by Kedi but ratio of material is different, No.3 is made by another company in China. (shape is different but they 'll give us a same one as Kedi's later)

1. Scintillator Test



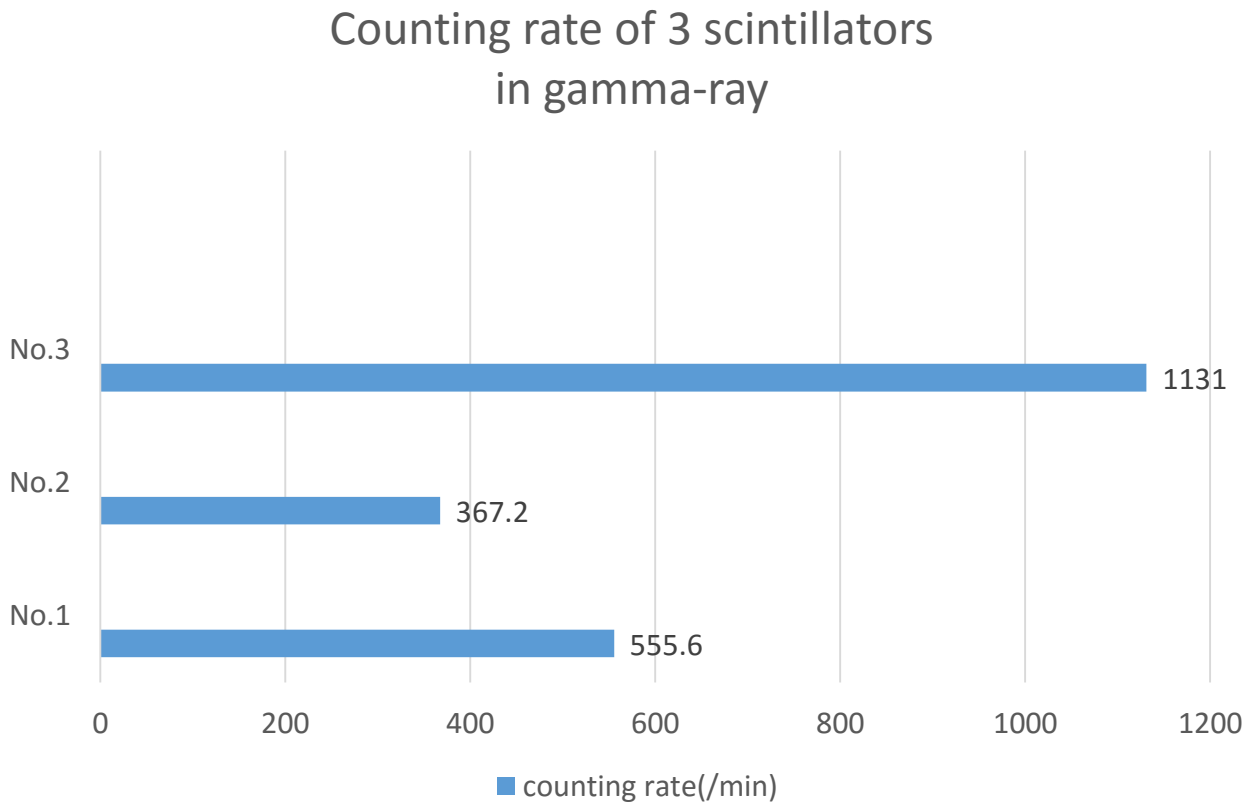
We have got the data about counting rate of different scintillators in this test system.

1. Scintillator Test



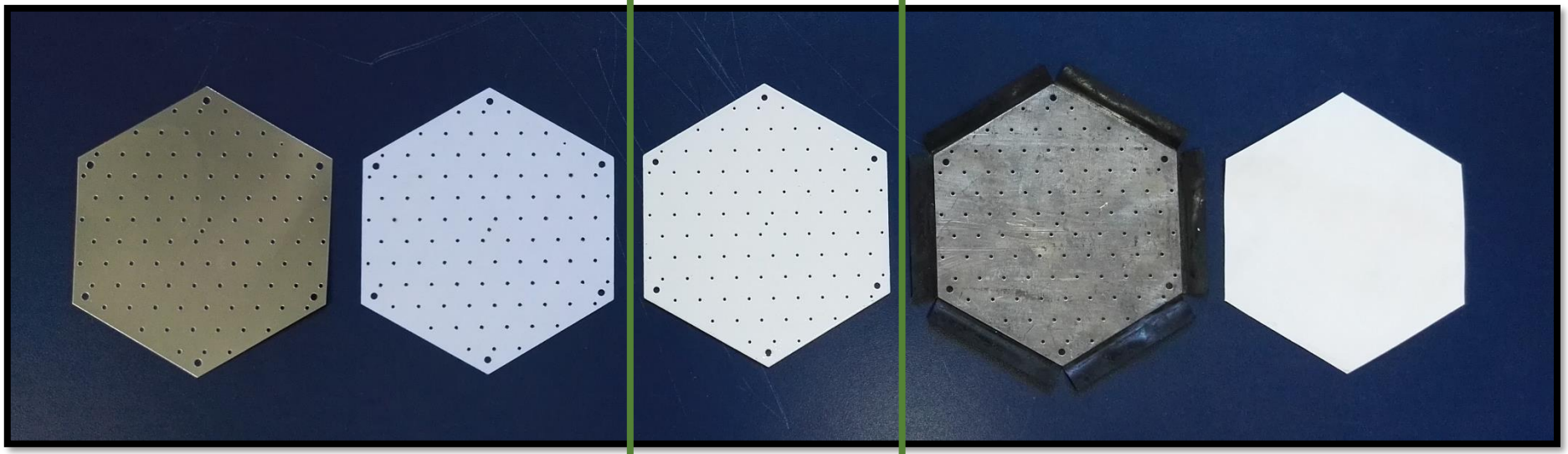
Threshold is 10mv
No.1: made by Kedi , old, thickness is 1.5mm
No.2: made by Kedi , new, thickness is 1.5mm
No.3: made by another company in China., thickness is 1.8mm

1. Scintillator Test



Threshold is 3mv
No.1: made by Kedi , old, thickness is 1.5mm
No.2: made by Kedi , new, thickness is 1.5mm
No.3: made by another company in China., thickness is 1.8mm

2. Reflective Material Test



PVC (expensive) | Print paper (useless) | Powder paint | none | TYVEK (difficult to cut)

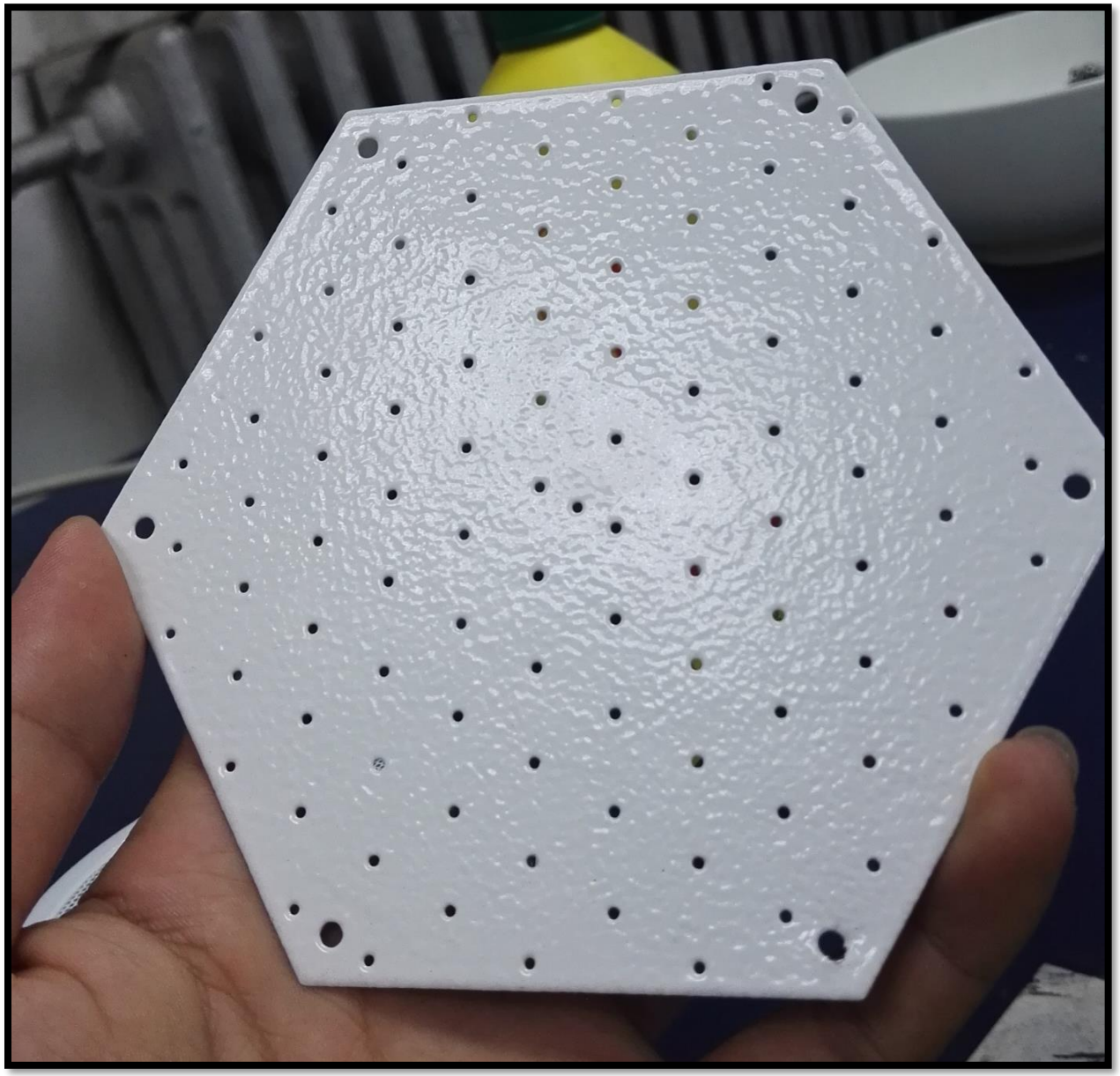
We have 4 kind of material, PVC, print paper, powder paint and TYVEK. Specially, I want to introduce a new way, Powder paint, to reflect the light. For painting use electrostatic coating. Polymer powder keeping on surface Pb plate by force of electrostatic attraction. Polymer powder are polymerized at 160-180C during 10-20 min in thermo camera.

2. Reflective Material Test

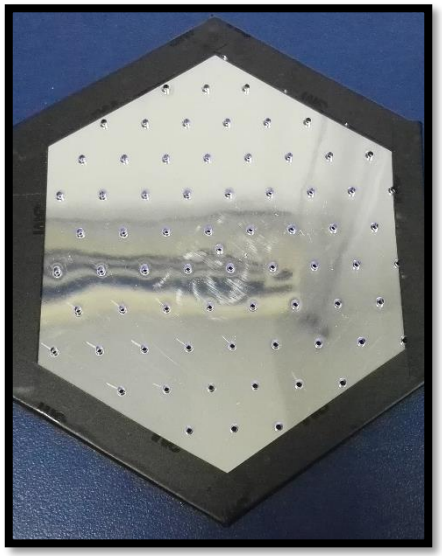
the reflection is diffuse reflection. It is better than specular reflection.

the thickness is 0.18mm,but they paint three times, the thickness would decrease to 0.12mm if just coat one time.

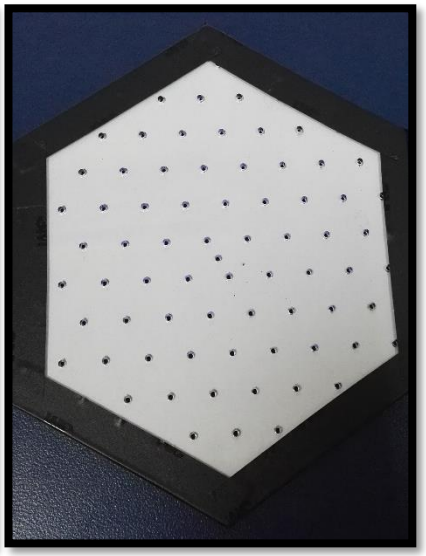
We have do some reflection test and we found that the effective of reflection is pretty good.



2. Reflective Material Test

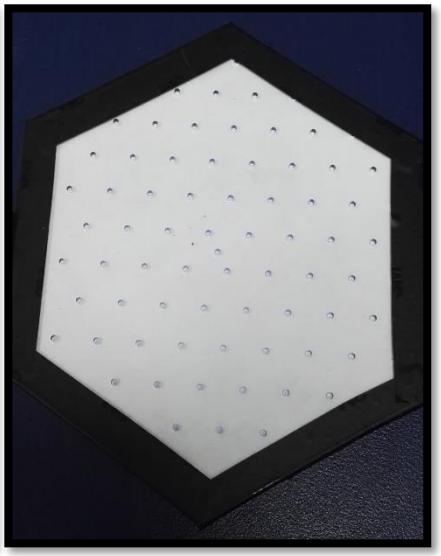


PVC
(expensive)

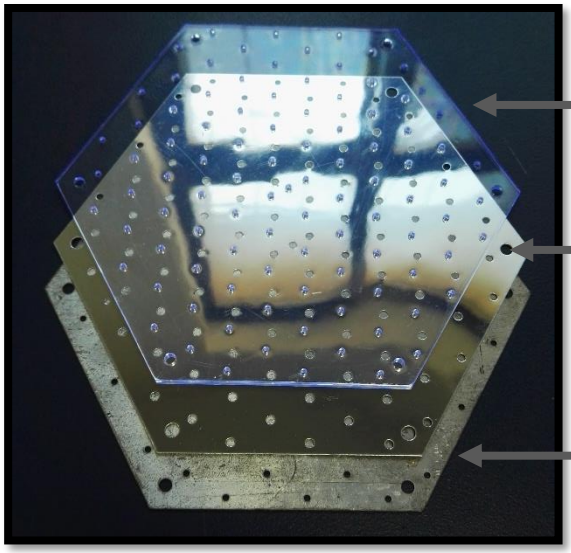


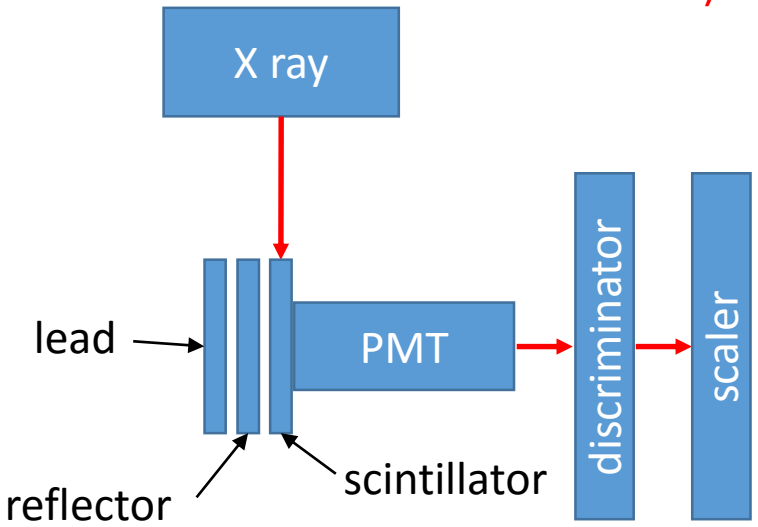
Print paper
(useless)

Powder paint



TYVEK
(difficult to
cut)





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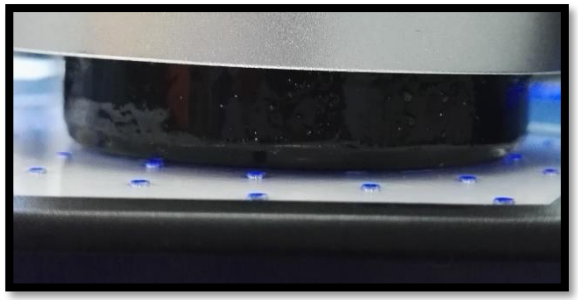
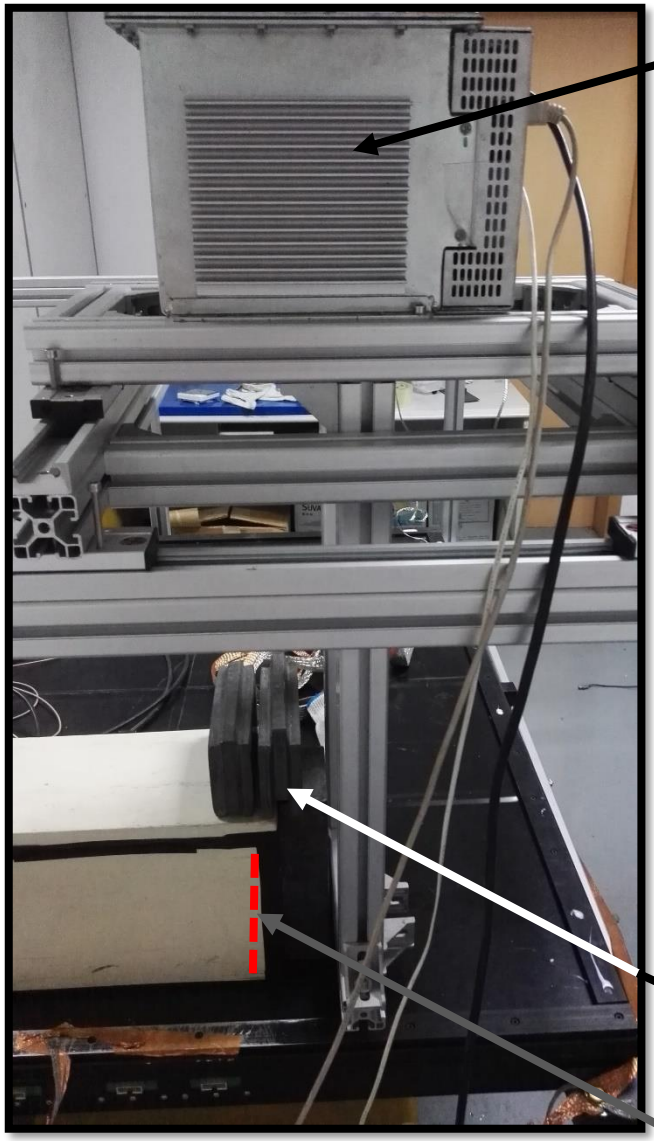
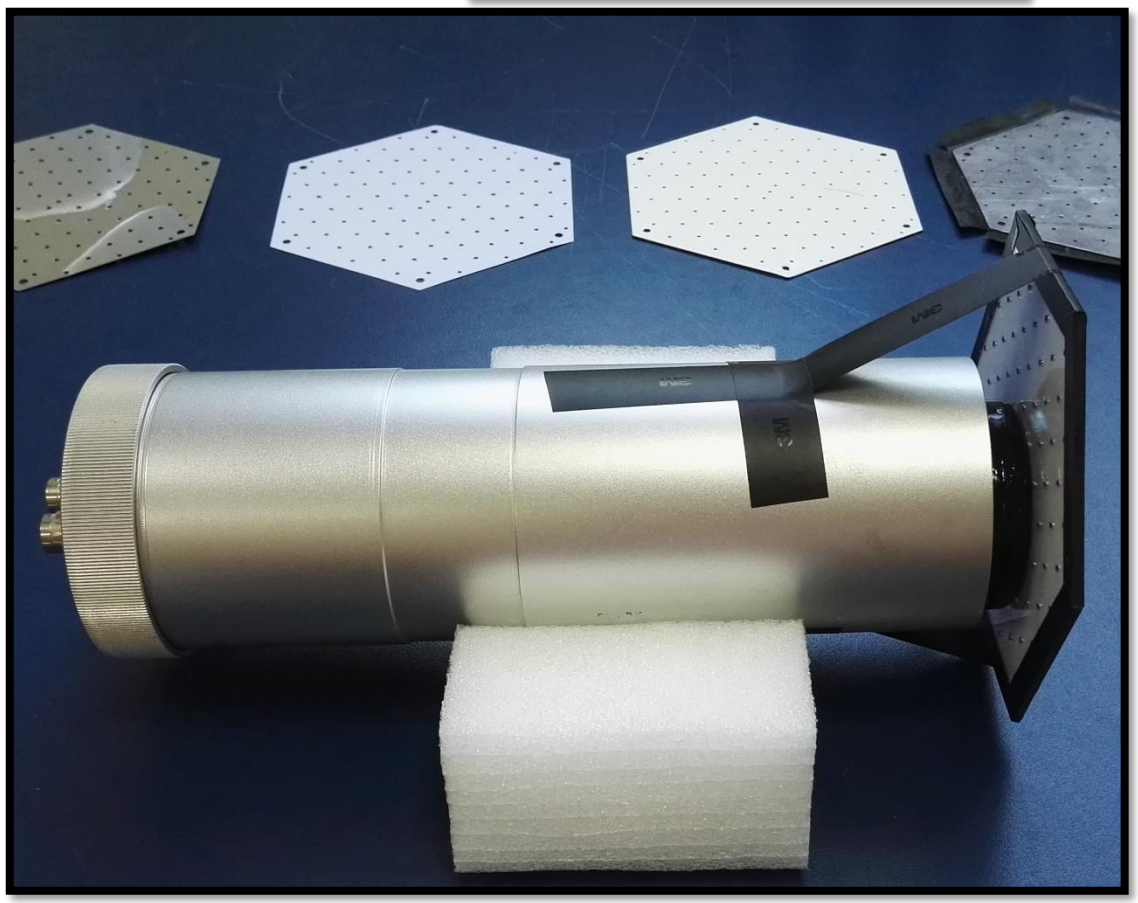
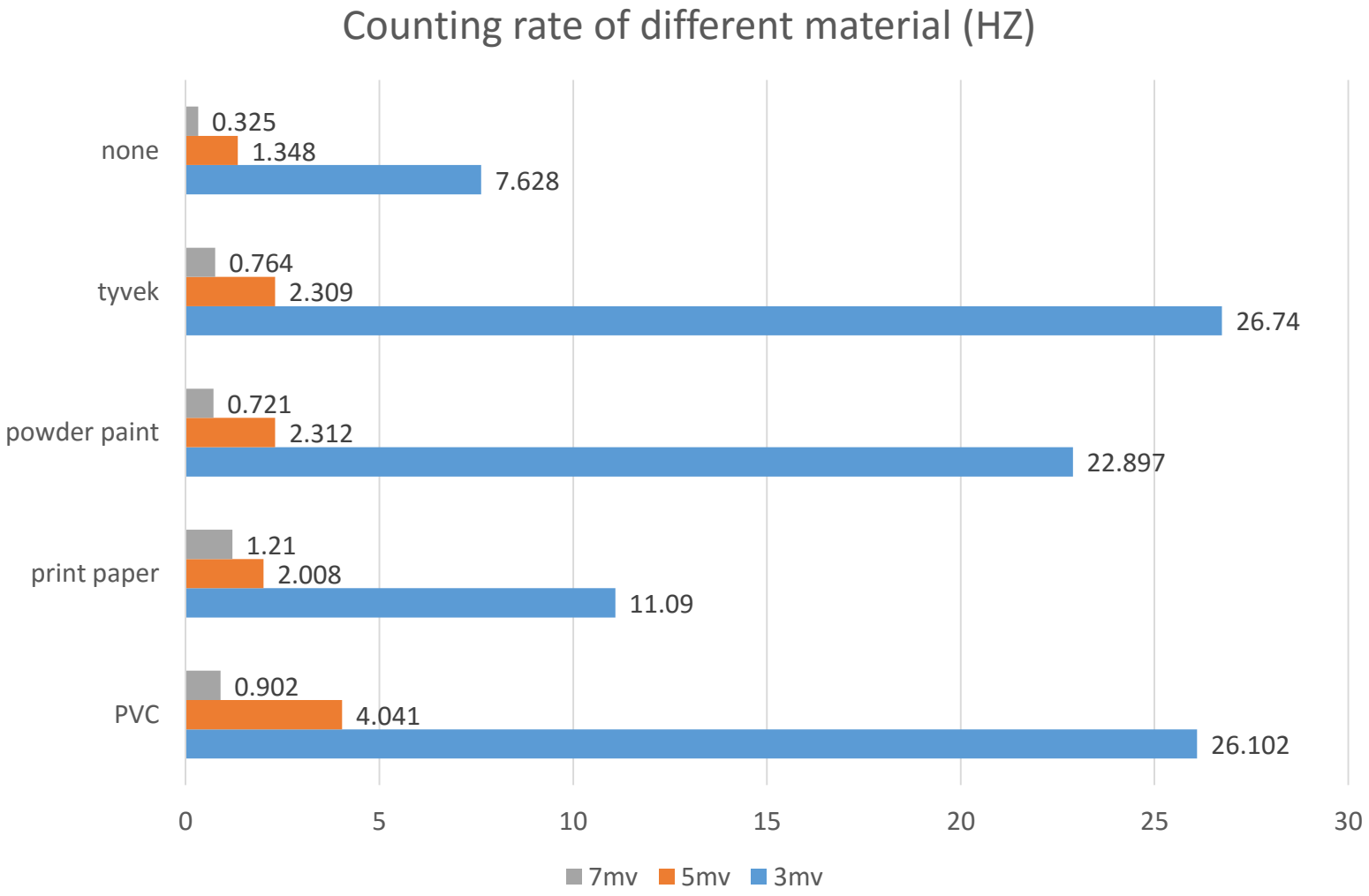






We have got the counting rate with different material in this test system.

2. Reflective Material Test



Thank You ! ! !