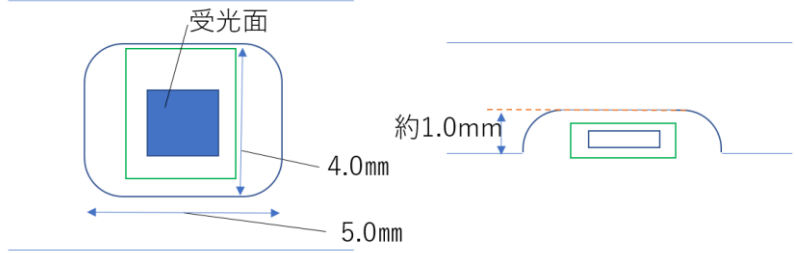
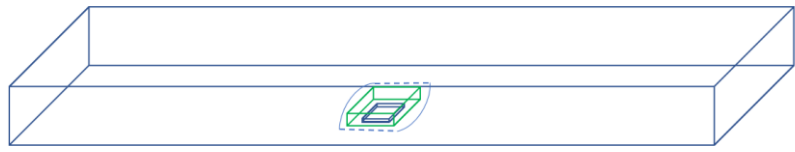


Optimization for Center hole scintillator strip

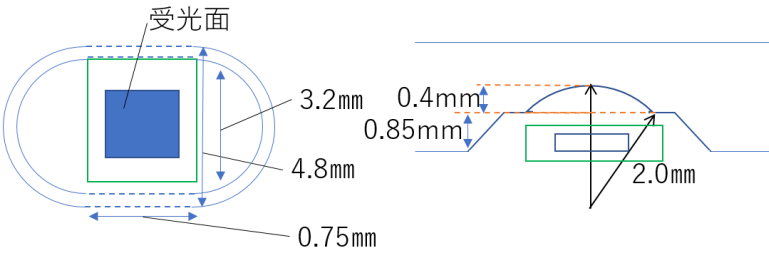
Ryosue Shirai(University of Shinshu)

January 11, 2019

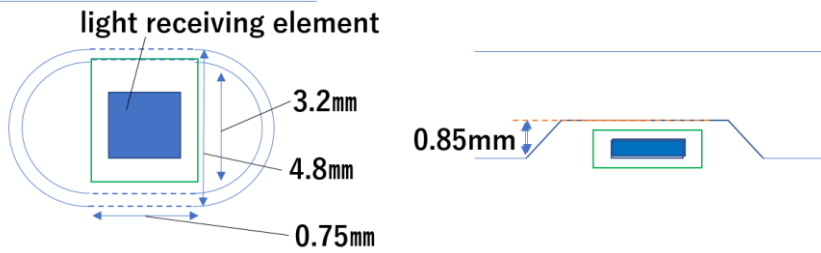
Calice-asia



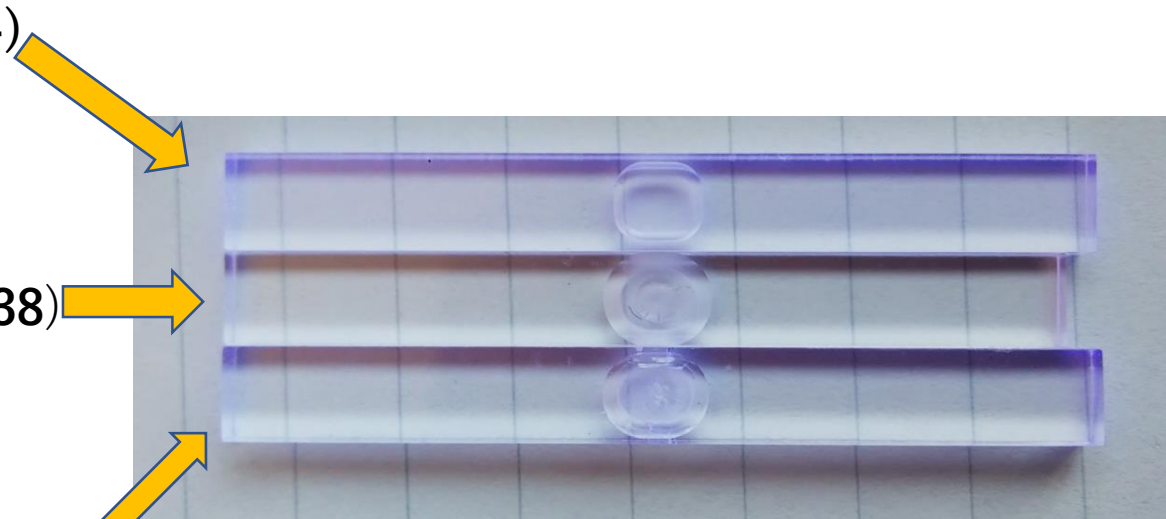
Ootani model(EJ-)



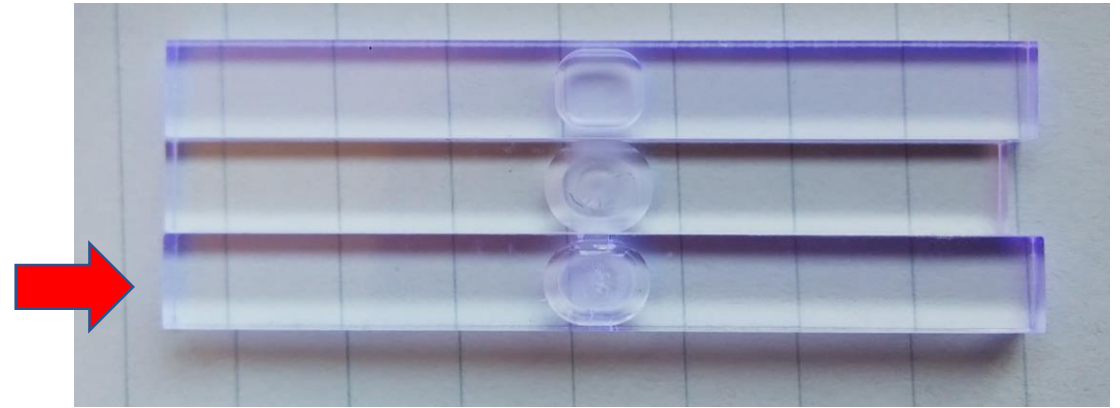
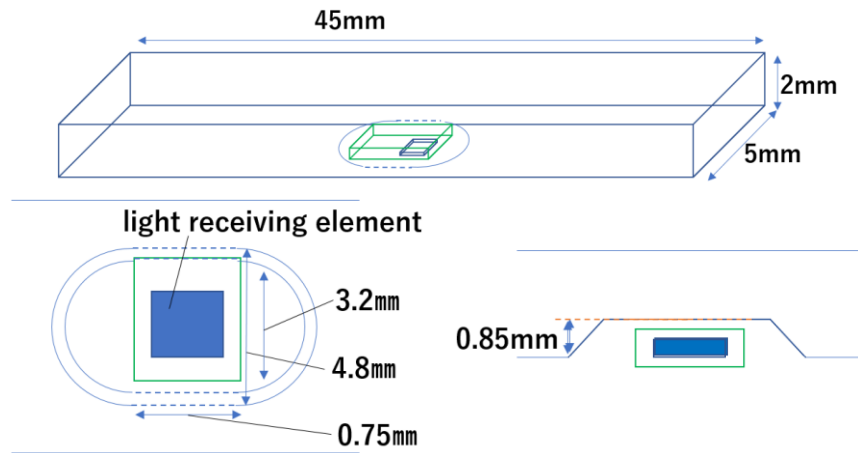
Shirai model (scsn38)



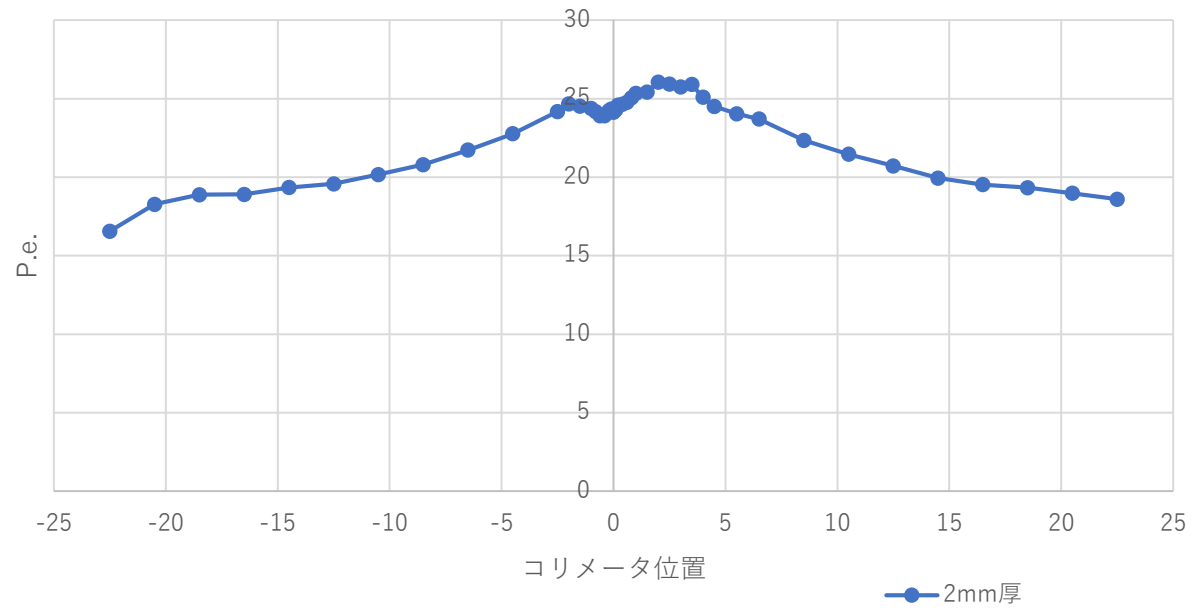
China dimple(BC408)



China dimple C24(2.0mm)



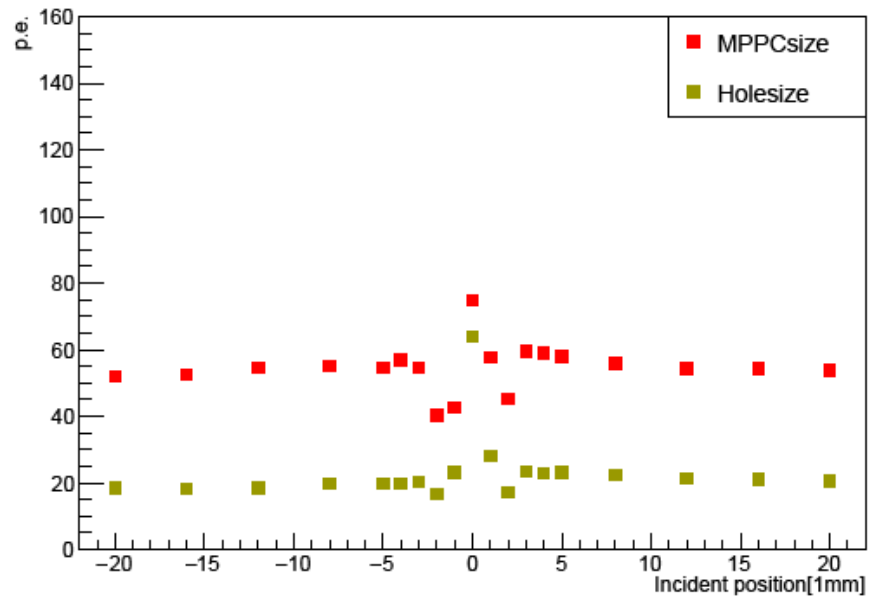
China dimple



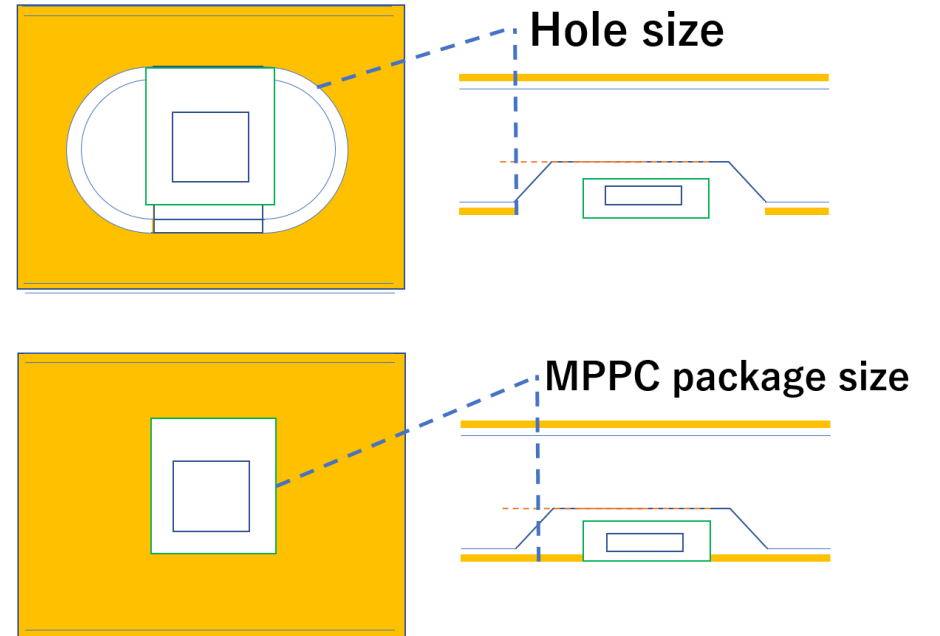
Reflective Window size



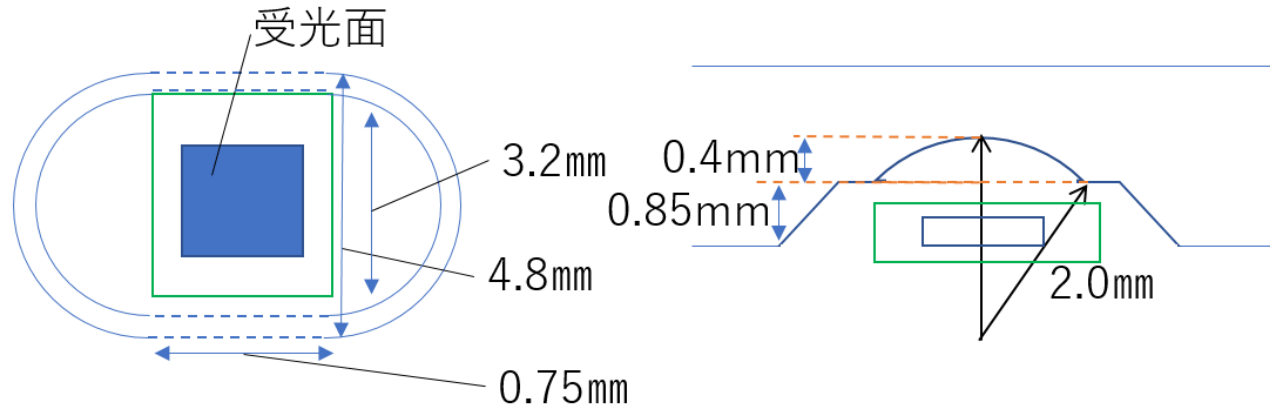
A



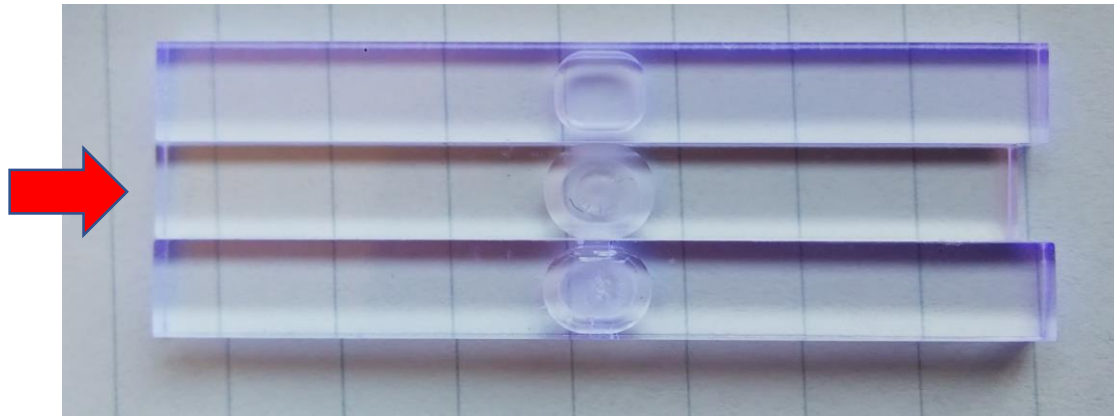
Reflective film window Simulation



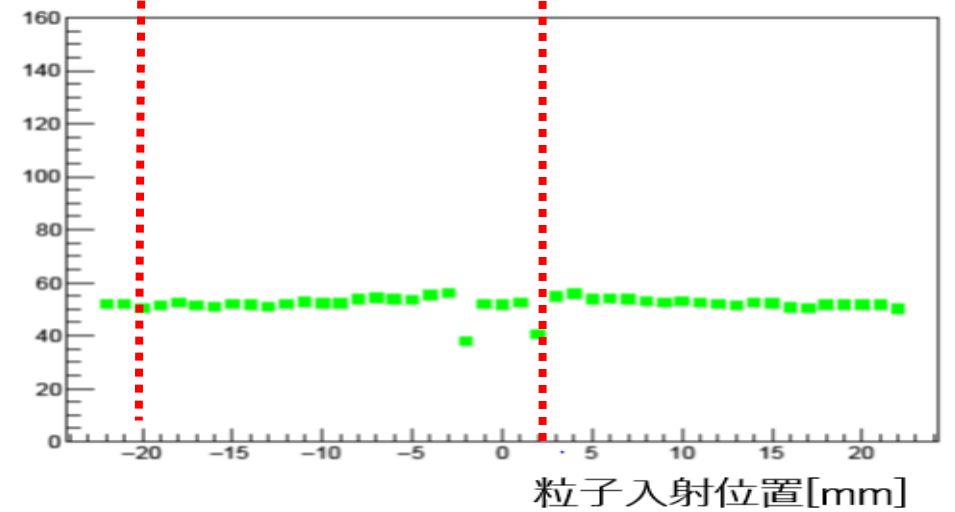
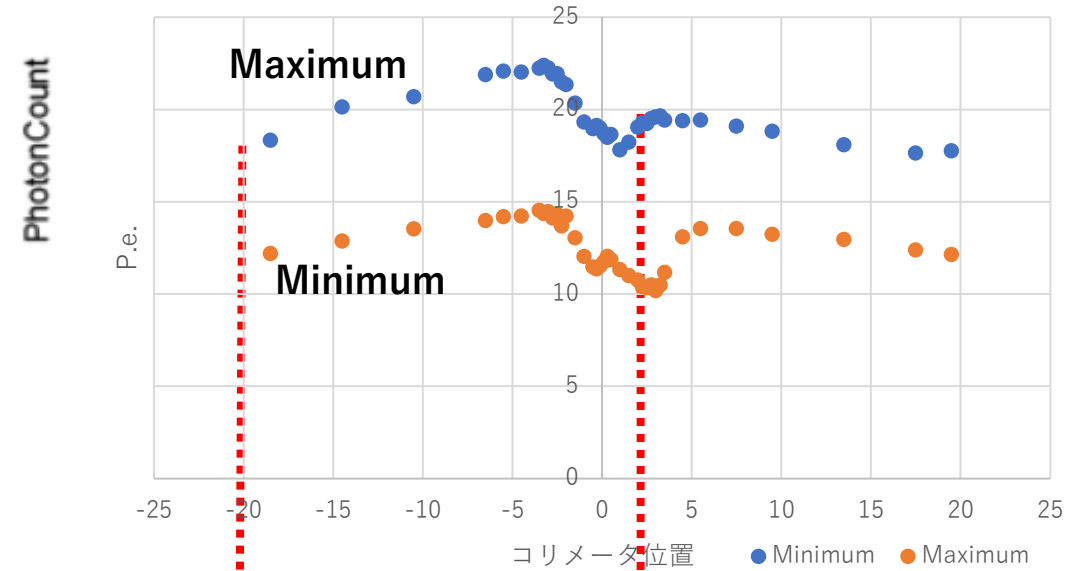
Shirai model



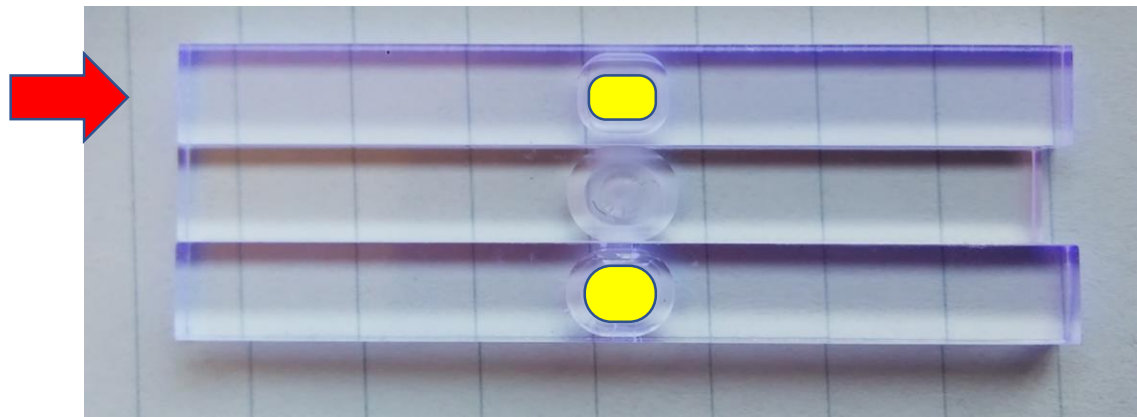
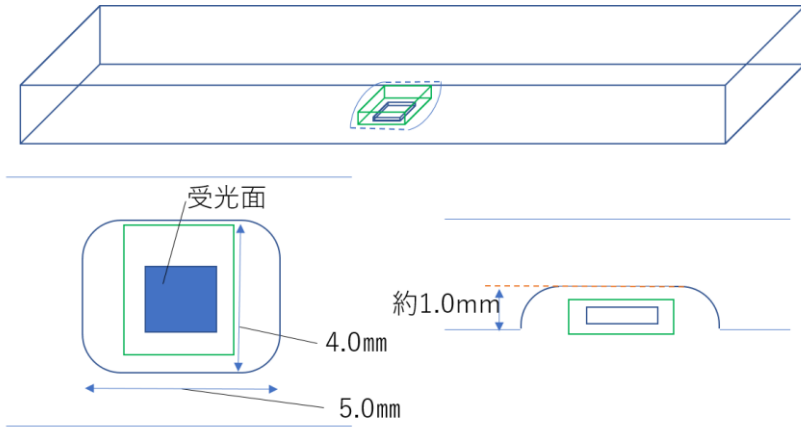
読み出し部形状



Shirai model(Film window size)

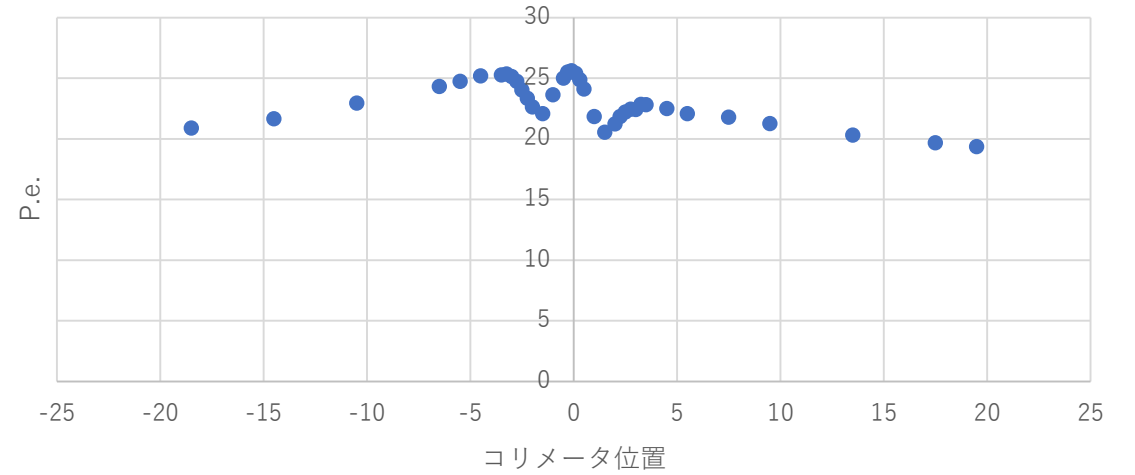


Ootani model

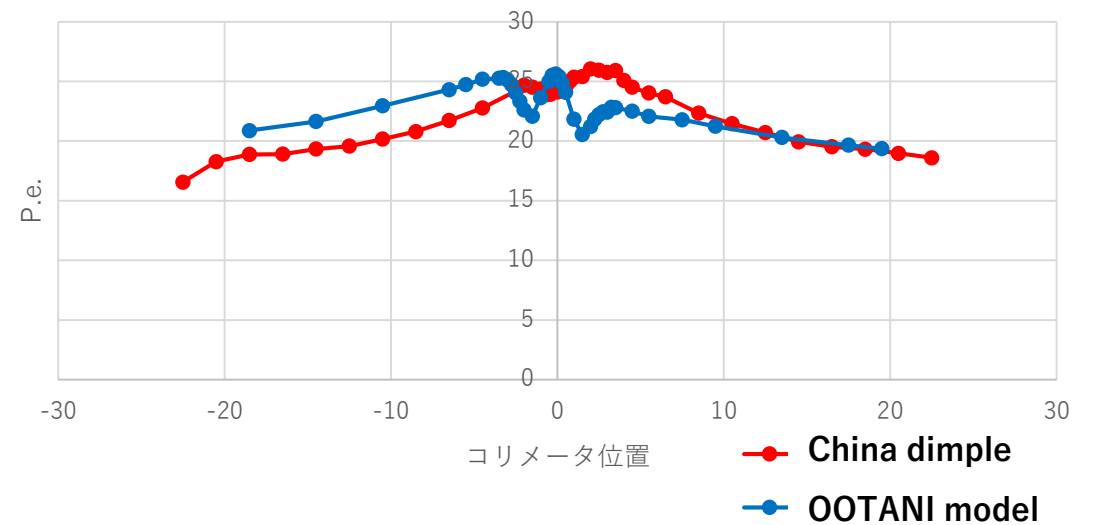


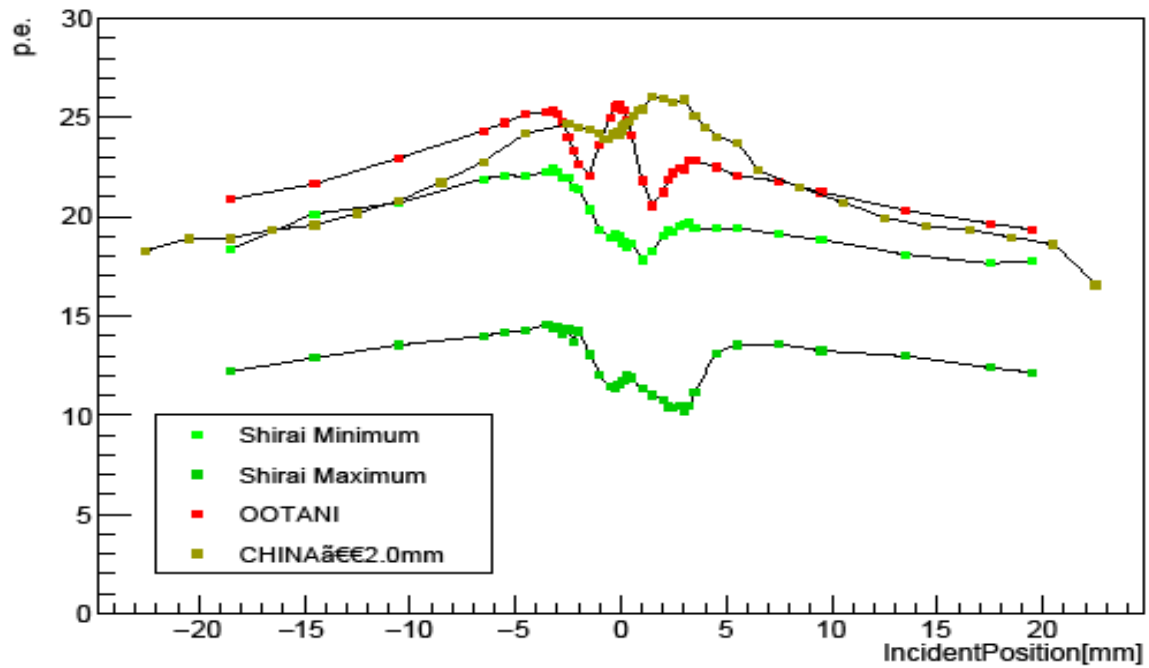
底面積はChina dimpleとOotani model はほとんど同じ
China dimpleにも中心部光量のふくらみがあるはず

Ootani model

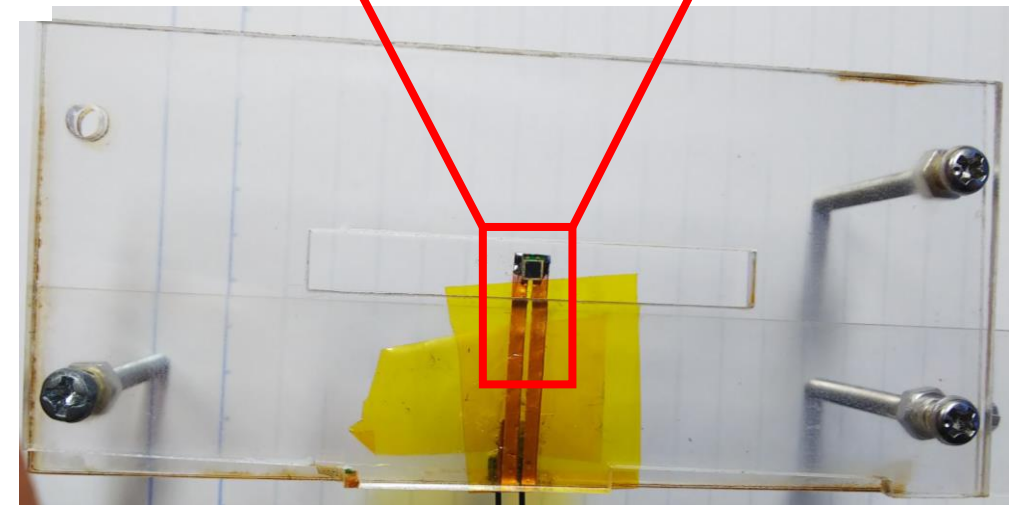


Ootani model & China dimple(2mm)





-20~+20mm	S Window Minimum	S Window Maximum	China 2.0mm	OOTANI
最大最小比	1.27	1.43	1.38	1.32
標準偏差	1.46	1.38	2.26	1.76
算術平均	19.8	12.5	23.2	23.0
中央値	19.4	12.4	24.2	22.8
$ (平均^2 - 値^2) / 平均^2 $	4.71	7.19	(5.98)	4.35

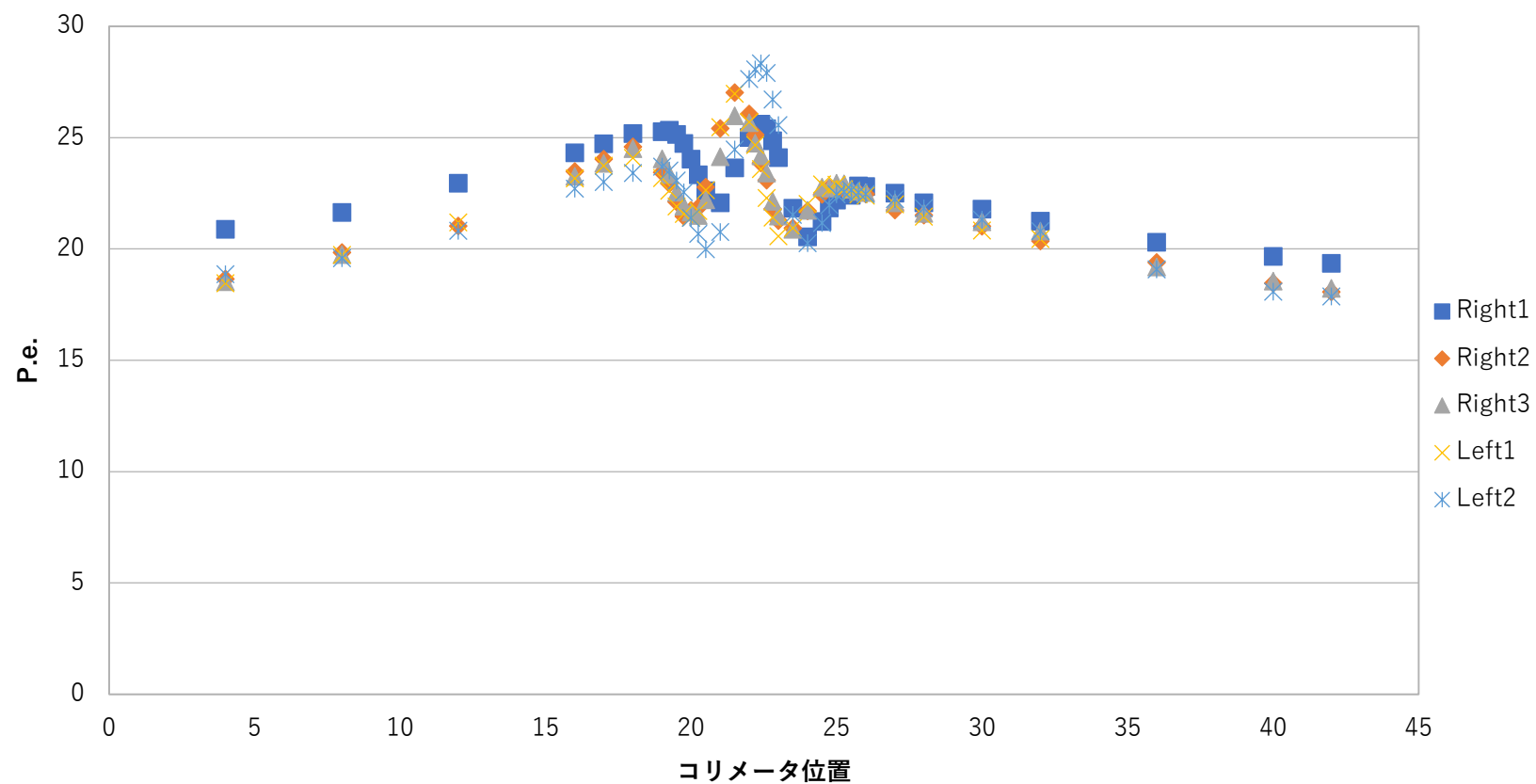


Backup(追加データ)

シンチ逆からの測定

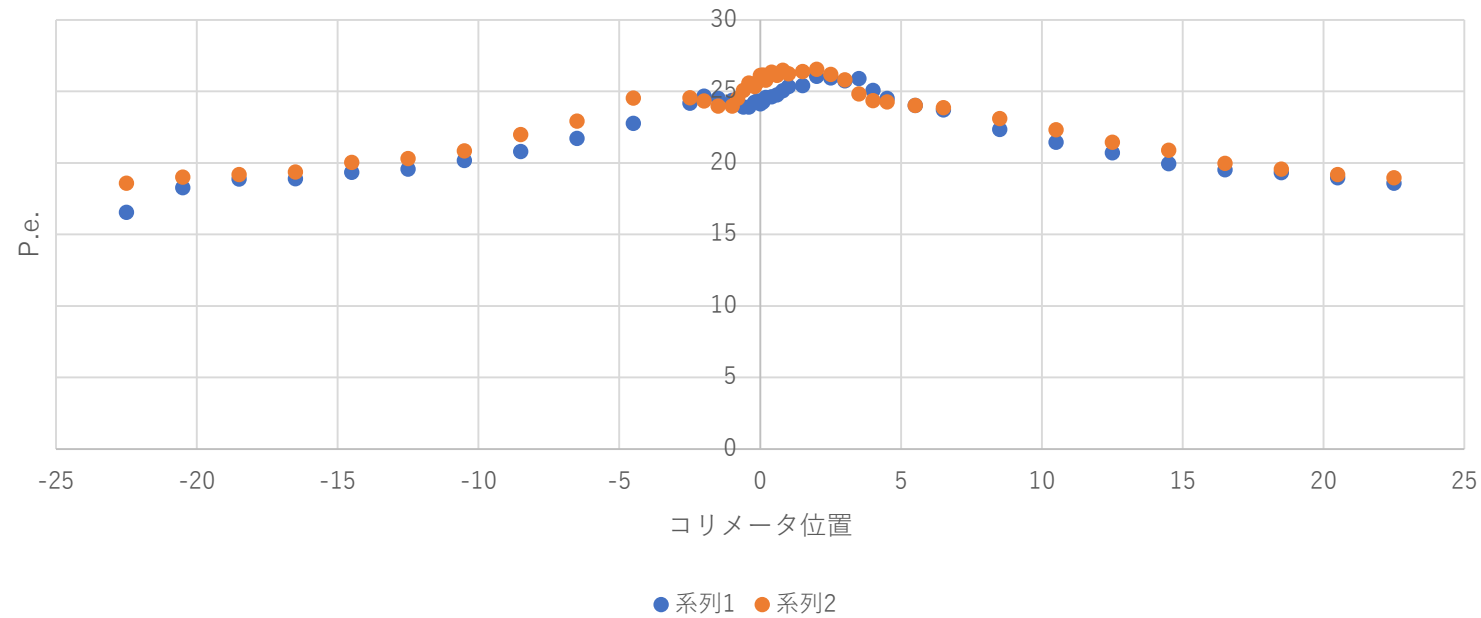
Ootani Model

シンチレータ本体のみを
45mm方向について反転させた
傾向は同じ



backup

China dimple 2.0mm

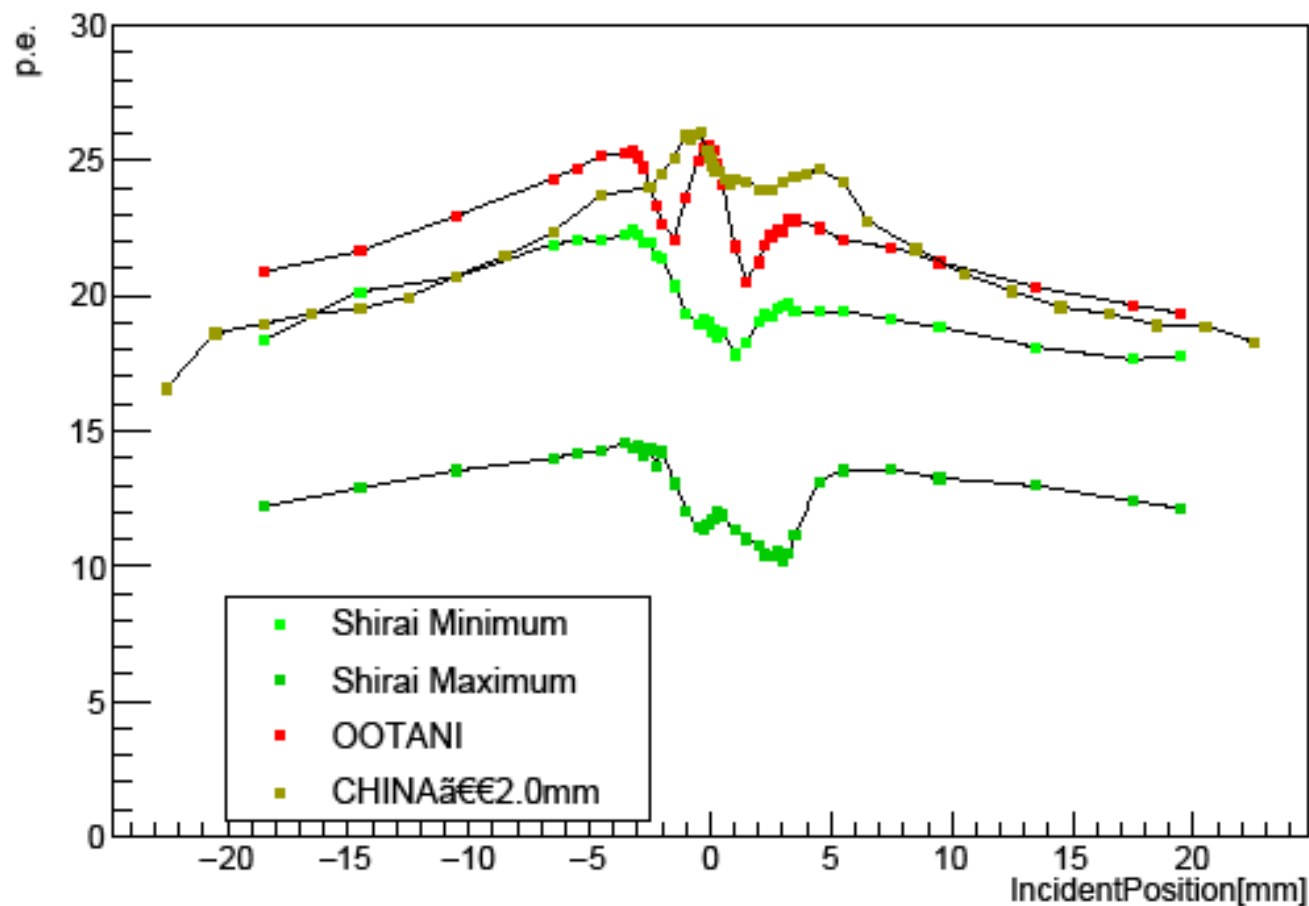


China dimple (2mm)
2回測定分

backup(以後追加データ)

比較

:



P7左上図のChina dimple(2mm)のコリメータ位置を反転させた図

China dimple(2mm)とその他のシンチレータの測定間に一度MPPCを貼り直している。

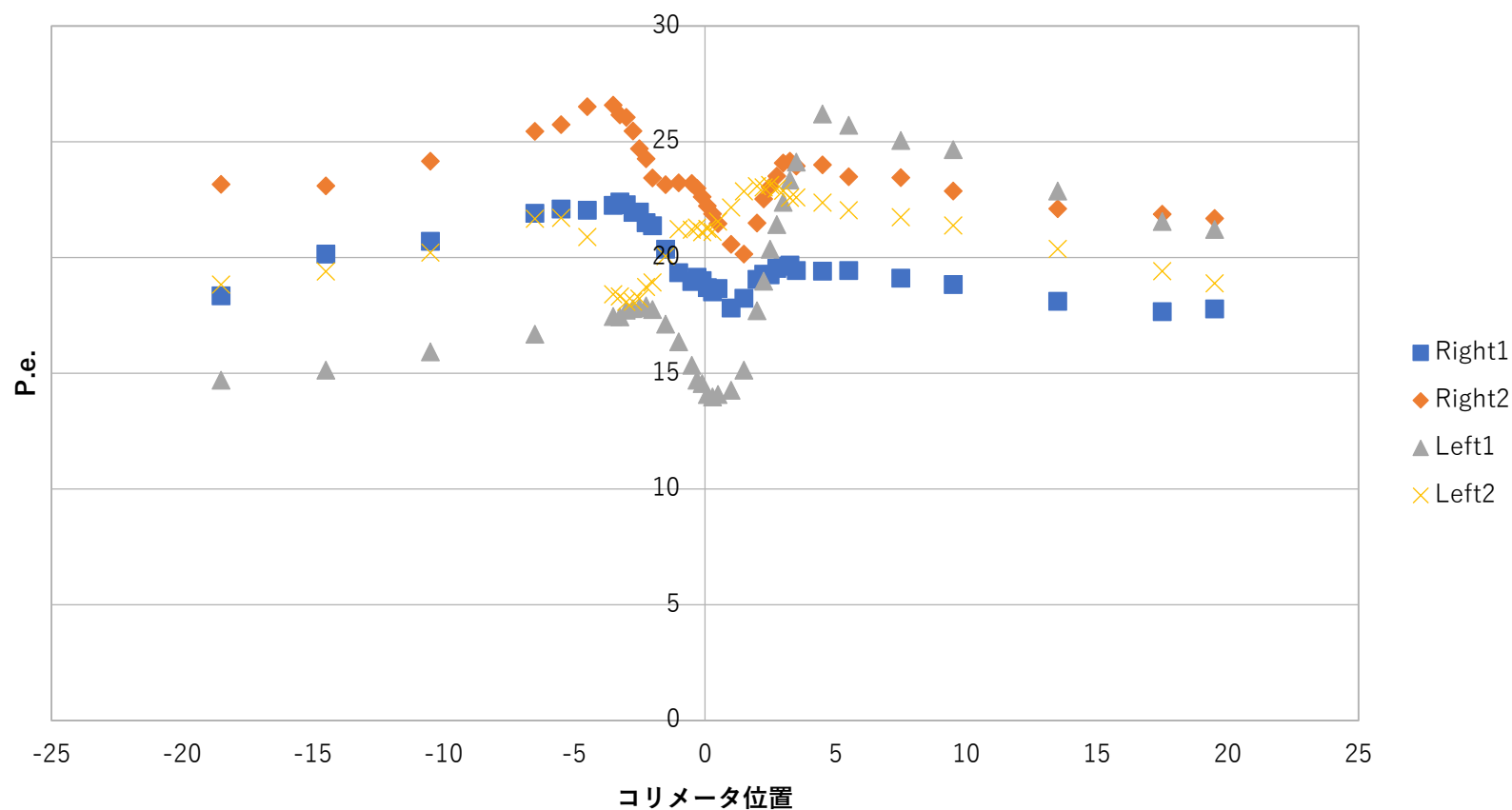
表面実装のMPPCが水平でない可能性がある

Backup(追加データ)

シンチ逆からの測定

Shirai Model

Left側、反射材の窓が
孔の中心をとらえていない



China dimple

