

Fwd ECAL Test Beam Crystals

SuperB ECAL Meeting
13/05/2009

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Crystals Dimensions

LSO cristas

- depth: 20 cm $\sim 17.5 X_0$
- Cristas arranged in 20 rings within 5x5 modules

Ring	A	B	C	D	E	F
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175 Xtals/Ring
35 Modules

1	19.52	23.05	18.66	21.53	25.53	20.58
2	20.30	23.01	19.44	22.40	25.49	21.45
3	21.08	22.98	20.22	23.27	25.46	22.31
4	21.86	22.95	20.99	24.13	25.43	23.18
5	22.63	22.82	21.77	24.99	25.29	24.04

205 Xtals/Ring
41 Modules

6	19.92	22.90	19.18	22.02	25.38	21.19
7	20.58	22.89	19.84	22.75	25.37	21.93
8	21.24	22.87	20.49	23.49	25.35	22.66
9	21.90	22.86	21.15	24.22	25.34	23.39
10	22.55	22.76	21.80	24.95	25.23	24.11

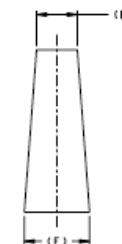
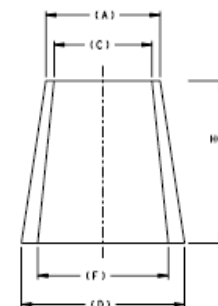
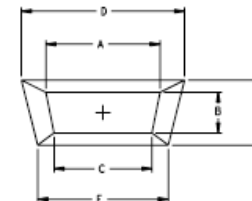
235 Xtals/Ring
45 Modules

11	20.16	22.85	19.50	22.31	25.33	21.57
12	20.73	22.85	20.07	22.95	25.33	22.21
13	21.31	22.86	20.64	23.59	25.34	22.85
14	21.89	22.87	21.22	24.23	25.35	23.48
15	22.46	22.80	21.79	24.87	25.27	24.12

260 Xtals/Ring
52 Modules

16	20.83	22.90	20.21	23.07	25.38	22.38
17	21.36	22.92	20.73	23.65	25.40	22.96
18	21.88	22.95	21.26	24.23	25.43	23.54
19	22.41	22.98	21.78	24.82	25.46	24.12
20	22.93	22.93	22.30	25.40	25.40	24.70

~4400 Crystals



❑ Testbeam plans foresee to test a full 5x5 module

❑ Possible options:

- ❑ All crystals equal to ring 10 (save money)
- ❑ Use real cristal size from ring 6 to 10 (5 different sizes : more expensive)

Performance comparison

- 5x5 module
- Beam: e- at the center of the module
- To have quick response two qualitatively interesting configurations
 - Module with nominal crystals size
 - All module with ring 6 crystals (geometry modification quicker than all ring 10)
 - All module with ring 10 crystals not yet ready

