CLAS12 Light Threshold Cherenkov Counter (LTCC)

WBS 2.4.2.2.4.2

**LTCC Non Labor**

Total Budget: $50,016

Break Down:

|  |  |  |
| --- | --- | --- |
| 242242036 | Wavelength/Quartz PMT tests | $2,000 |
| 242242076 | Support Frame Fabrication for 1S in TED | $1,000 |
| 242242077 | Infrastructure Consumables | $18,000 |
| 242242108 | Lexan/Acrylic/Over- Coating Procurement (all sectors) | $2,000 |
| 242242137 | Glue Procurement | $2,016 |
| 242242162 | Divider Modifications Design and Test | $2,000 |
| 242242300 | Rear Brace Manufacture | $500 |
| 242242335 | Box Refurbish Consumables | $18,000 |
| 242242050 | Aligment tool manifacturing | $4,500 |

**Individual Activities:**

**Activity ID** – 242242036

**Activity Name** – Wavelength/Quartz PMT tests

Budget amount: $2,000.00

The budget includes material costs for testing the p-Terphenyl evaporating technique at Temple University, such as parts to get the evaporator in top shape for a good vacuum and a functioning quartz monitor.

The cost also include material costs for testing the PMTs using UV light.

The estimate is based on conversations with Prof. Zein-Eddine and JLab experience.

**Activity ID** – 242242076

**Activity Name** – Support Frame Fabrication for 1S in TED

Budget amount: $1,000

The LTCC needs to be elevated for access to mirrors and PMTs. This budget includes the material costs for the frame fabrication.

The estimate is based on previous JLab experience and assessments by the engineering team.

**Activity ID** – 242242077

**Activity Name** – Infrastructure Consumables

Budget amount: $18,000

The estimate is based on previous JLAB experience and assessments by the engineering and tech teams.

**Activity ID** – 242242108

**Activity Name** – Lexan/Acrylic/Over- Coating Procurement (all sectors)

Budget amount: $2,000.00

This budget includes the test of vendor samples to verify the reflectivities.

**Activity ID** – 242242137

**Activity Name** – Glue Procurement

Budget amount: $2,016

The budget includes grey epoxy 2216 grey to attach and seal the LTCC windows:

* 3M Scotch-Weld 2216 B/A, gray, 1 case each of qt. kits.

The budget estimate is based on PR 176451, adjusted for quantity and inflation.

**Activity ID** – 242242162

**Activity Name** – Dividers Modifications Design

Budget amount: $1000

The budget includes the LTCC divider modification design for the Photonis dividers previously used in the LTCC.

This estimate is based on communications with Vladimir Popov, the author of the modifications already implemented in the HTCC PMTs.

**Activity ID** – 242242300s

**Activity Name** – Rear Brace Manufacture

Budget amount: $500

A new rear brace is necessary to support the LTCC frame. The estimate is based on previous JLab experience and assessments by the engineers.

**Activity ID** – 242242335

**Activity Name** – Box Refurbish Consumables

Budget amount: $18,000

The budget of $3000/sector is based on previous JLAB experience and assessments by the engineering and tech teams.

**Activity ID** – 242242050

**Activity Name** – Aligment tool manifacturing

Budget amount: $4,500

This budget is based on previous JLAB experience and assessments by the engineering and tech teams.