**MUSE Basis of Estimate**

**Hamamatsu R9779 Photomultiplier Tubes WBS 7**

I. General Information

Task Name: PMT Purchase

Unique ID Number

Date of Estimate: 03/20/2014 (last update)

Estimate Generator: Steffen Strauch, R Ransome

Cost Category:

 X M&S

 SWF

Comments:

Vendor Quote Number if Applicable: Budgetary unit price estimate from Hamamatsu, based on 180 units; e-mail September 19, 2013

Drawing Reference Number or Attachment:

Costing Method: Vendor quote

Total Task Cost: $187,272

Total Contingency: $31,836

II. Cost Estimate Breakdown

Cost of each element, along with justification

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | QTY | Description | Unit Price USD | Total Price USD |
| 1 | 204 | Hamamatsu R9779 | $850 | $173,400 |
| 2 |  | 8% SC Tax |  | $13,872 |
|  |  | Total |  |  **$187,272** |

III. Contingency and risk analysis

We will add a contingency of 10% for currency fluctuation risk, for a total of 17%.



IV. Time Estimates and contingency on time

Time estimate is (optimistic+pessimistic+4\*most-likely)/6.

Sigma is (pessimistic-optimistic)/6.

Be sure to indicate if work days or calendar days.

Comments: No estimate yet.

