

## Instrumentation Request List for Experiment E06-007

### **Beam**

Polarization [%]	n/a
Beam polarimetry (Compton/Møller)	n/a
Helicity flip scheme (delayed/quartet/duo)	n/a
Energy range [GeV]	2.775 GeV
Energy measurement (Arc/EP)	yes
Current range [ $\mu$ A]	90 $\mu$ A
Spot size (h x v) [ $\sigma$ ] [ $\mu$ m]	h < 200, v < 100
Raster size (square/round) (h x v/ $\phi$ ) [mm]	4x6 (square)
Energy spread [ $\sigma$ ]	<2.5x10 <sup>-5</sup>
Energy lock	yes

### **Targets** (specify thickness)

Photon radiator	no
LH2 (4/15/20 cm)	no
LD2 (4/15/20 cm)	no
Helium-3/4 (4/10/15/20 cm)	no
Target ladder angle (w.r.t. beam)	30 deg
Solid targets (specify each)	208Pb (0.5 mm thick, 1" x 1") 12C, BeO

### **Spectrometers** (specify required detectors)

#### **HRS-L**

Angle range [°] fixed at 20.37 deg  
Momentum range [GeV/c] 2.366 GeV/c  
VDC1  
VDC2  
S0  
S1  
Gas Cerenkov (short)  
S2 (Prefer S2m)  
NaI  
Preshower/Shower

#### **HRS-R**

Angle range [°] 25 – 85 deg  
Momentum range [GeV/c] 0.989 GeV/c  
VDC1  
VDC2  
S0  
S1  
A1, A2 (Aerogel Cerenkov)  
S2 (Prefer S2m)  
Preshower/Shower

### **Trigger/DAQ**

Coincidence/single  
Define trigger  
T5 coincidence, T1 electron arm single, T3 proton arm single,  
T2 only electron arm S1 (or electron arm S2), T4 only proton arm S1 (or proton arm S2)

### **Other Instrumentation**

None