ALFA SIGNAL FLOW DIAGRAM
(One polarization of one beam shown)

CAL IN from 8-way splitter

Inside Dewar

UPSTAIRS in GD

LNA
1225 - 1525 MHz
35 dB

ALFA Filter Bank

LPF
1.55 GHz

BPF
1.39 - 1.49 GHz

UPSTAIRS in GD

ALFA Downconverter
("Eddie’s Box")

1225 - 1525 MHz
(or 1390 - 1490)

UPSTAIRS in GD

L.O. In
1825 MHz
(typical)

Monitor Output

F.O. TX

100 - 400 MHz

1.2 km fiber
-0.5 dB total loss

IF
100 - 400 MHz

Digital RF Atten

Rack in Spectrometer Room

100 - 400 MHz

Monitor Selector SW
(manually operated from IF/LO Rack 3)

IF from single-beam receiver

IF 100 - 400 MHz

100 - 400 MHz

8-way Power Divider

8-way

IF/LO Rack 4
(rack 6 for other POL)

IF/LO Rack 4 (rack 6 for other POL)

PDEV Racks

100 - 400 MHz

To WAPP

1/2 PDEV (Mock)
Spectrometer

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ALFA_Signal_diagram.fcl