



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Gubelli

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Checked:

: L1533

DETAILS:

data: step2b\warc\140109A

The West Arc SLM was surveyed January 9th, 2014. The following data shows the ideal coordinates for the upstream [MXPAA30] and downstream [MQPAA30] components in the JLAB coordinate system. Additionally the found and ideal SLM tube entrance, SLM tube exit and downstream flange coordinates are shown in the JLAB system. Additionally the SLM found and ideal locations are shown in a beam following system with the origin at the tube entrance.

Finally the ideal angle from the entrance to exit of the tube relative to the straight ahead beam is given along with the found angle and pitch for the entrance and exit.

Components Ideal Coordinates			
Component	x [m]	y [m]	z [m]
MXPAA30 Ent	76.64306	100.00000	-225.98200
MXPAA30 MagC	77.17665	100.00000	-224.05387
MXPAA30 Exit	77.61498	100.00000	-222.10188
MXPAA30 Mech	77.15283	100.00000	-224.04790
MQPAA30 Ent	77.85956	100.00000	-220.87229
MQPAA30 MagC	77.88882	100.00000	-220.72517
MQPAA30 Exit	77.91809	100.00000	-220.57805
SLM DATA			
Found Mechanical Coordinates			
	x [m]	y [m]	z [m]
TubeUp	77.68018	100.00124	-221.77327
TubeDn	77.76019	100.00380	-221.41390
EndFlg	77.77313	100.00416	-221.28003
Ideal Mechanical Coordinantes			
	x [m]	y [m]	z [m]
TubeUp	77.68456	100.00000	-221.75170
TubeDn	77.77058	100.00000	-221.38490
EndFlg	77.78178	100.00000	-221.26290
Found Beam Following Coordinates			
	x [mm]	y [mm]	z [mm]
TubeUp	-0.088	1.240	-22.011

TubeDn	8.271	3.801	346.063	
EndFlg	-5.151	4.164	479.892	
Ideal Beam Following Coordinates				
	x [mm]	y [mm]	z [mm]	
TubeUp	0.000	0.000	0.000	
TubeDn	12.805	0.000	376.534	
EndFlg	0.000	0.000	498.375	
ideal angle from beam entrance to exit of tube				1.94778
found angle				1.3092
found pitch				0.39862

Preliminary