

Procedure for Helicity Magnet Test:

The value 100 below in the table represents either micro-radian, or a generic common scale of kick angle deemed proper for the helicity magnets during this test (e.g., 50 or 200 micro-radian, but **make it consistent, at least across each column, across the entire table**).

Setup:

- Open a UNIX X-term. Go to /a/opsdata/optics/Gold_daily/. Data acquisition will be done here.
- Send 8 μ A tune beam to 60 MeV inline dump.
- Inspect Injector orbit and make necessary corrections
- Open 30 hz BPM spike screen for Injector

For each test, set the 4 helicity magnet amplitudes as prescribed, and do the following

- Inspect on the 30 hz BPM spike that **stable** signal is established. If not note in comment.
- Run EZLOG:
 - ❖ Type HMDAP in the X-term. A **time stamp** should appear, followed by the message " **msg: all connected**". If instead error messages appear such as complaining about not being able to connect to some signals, the signals in question should be addressed first.
 - ❖ Let it run for 2 minutes of good data (excluding beam loss, in which case do not kill EZLOG, but make sure integrated time with good beam present is about 2 minutes before abort).
 - ❖ In the end type ctrl-C to kill the process.
- Record time stamp for this EZLOG in the table. Note any exception in comments.
- If any amplitude other than the nominal one is used, note it in the table.

Do as many as allowed by time.

Turn off all helicity magnets at the end.

Corrector combinations:

Test	0L01V	0L03V	0L02H	0L03H	EZLOG Time Stamp	Comment
0	0	0	0	0		
1	100	0	0	0		
2	0	100	0	0		
3	0	0	100	0		
4	0	0	0	100		
5	100	100	0	0		
6	100	-100	0	0		
7	0	0	100	100		
8	0	0	100	-100		
9	100	0	100	0		
10	100	0	-100	0		
11	0	100	0	100		

12	0	100	0	-100		
13	100	100	100	100		
14	100	-100	100	-100		
15	100	100	-100	-100		
16	100	-100	-100	100		
17						
18						
19						
20						
21						
22						
23						
24						