



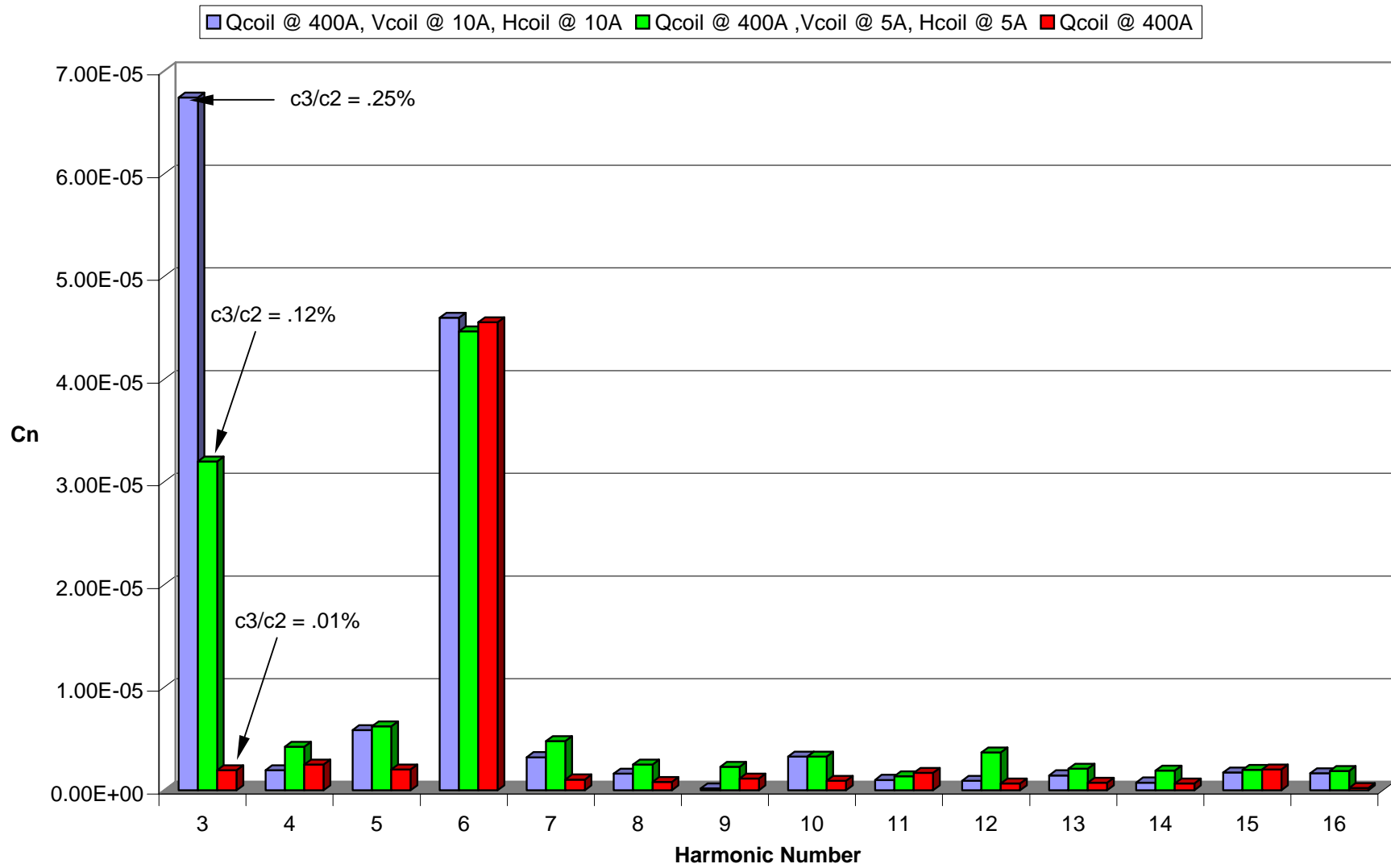
MEBT MEETING AGENDA

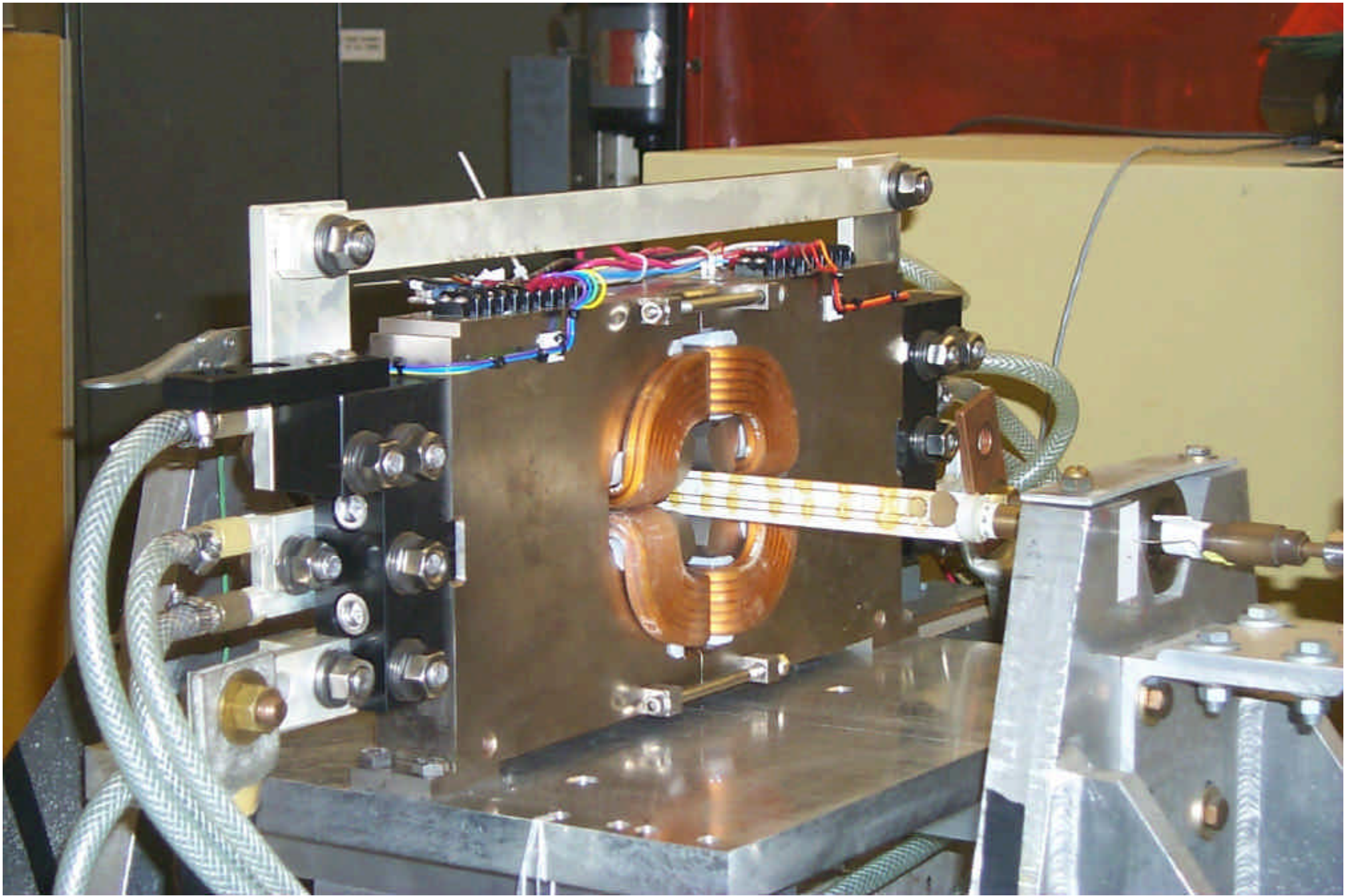
December 7, 2000

1. **Quadrupole Measurements** Daryl
 - ◆ Quad magnet assembly **complete** 11/30/00 OR,UC
 - Magnetic measurements **complete**
 - Summary of Results
 - Split Test Results (Photo)
 - Triplet Test Results (Photo)
2. **BPM's** Daryl
 - Fabrication drawings are complete (except assy dwg's)
 - Parts out for bid except bore tubes and spools
3. **Chopper Beam Box Update (LANL)** Andrew
4. **Chopper Target Fabrication Update** Daryl
5. **Vacuum System Update** Daryl
 - Varian Dual controller selected
 - Roughing Cart Status
 - RFQ - MEBT Gate valve (dwg)
6. **Slit/Beamstop FEA Status** Daryl
7. **Electrical Systems Update (Rebuncher)** Alex
8. **Upcoming Tasks and Milestones**
 - ◆ Raft Systems FDR 1/31/01 OR,UC
 - ◆ Rebuncher Cavity #1 Received 1/31/01 OR
 - ◆ Profile Monitor FDR 1/31/01

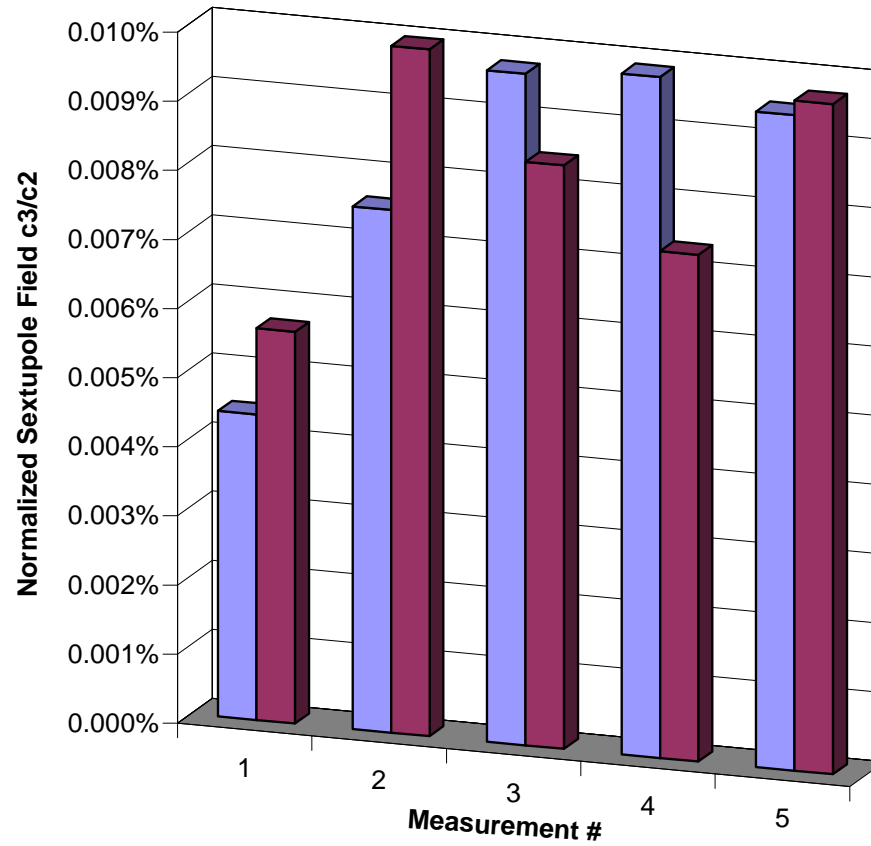
Next Meeting, Date and Time TBD

Affect of Steering Coils on Field Multipoles

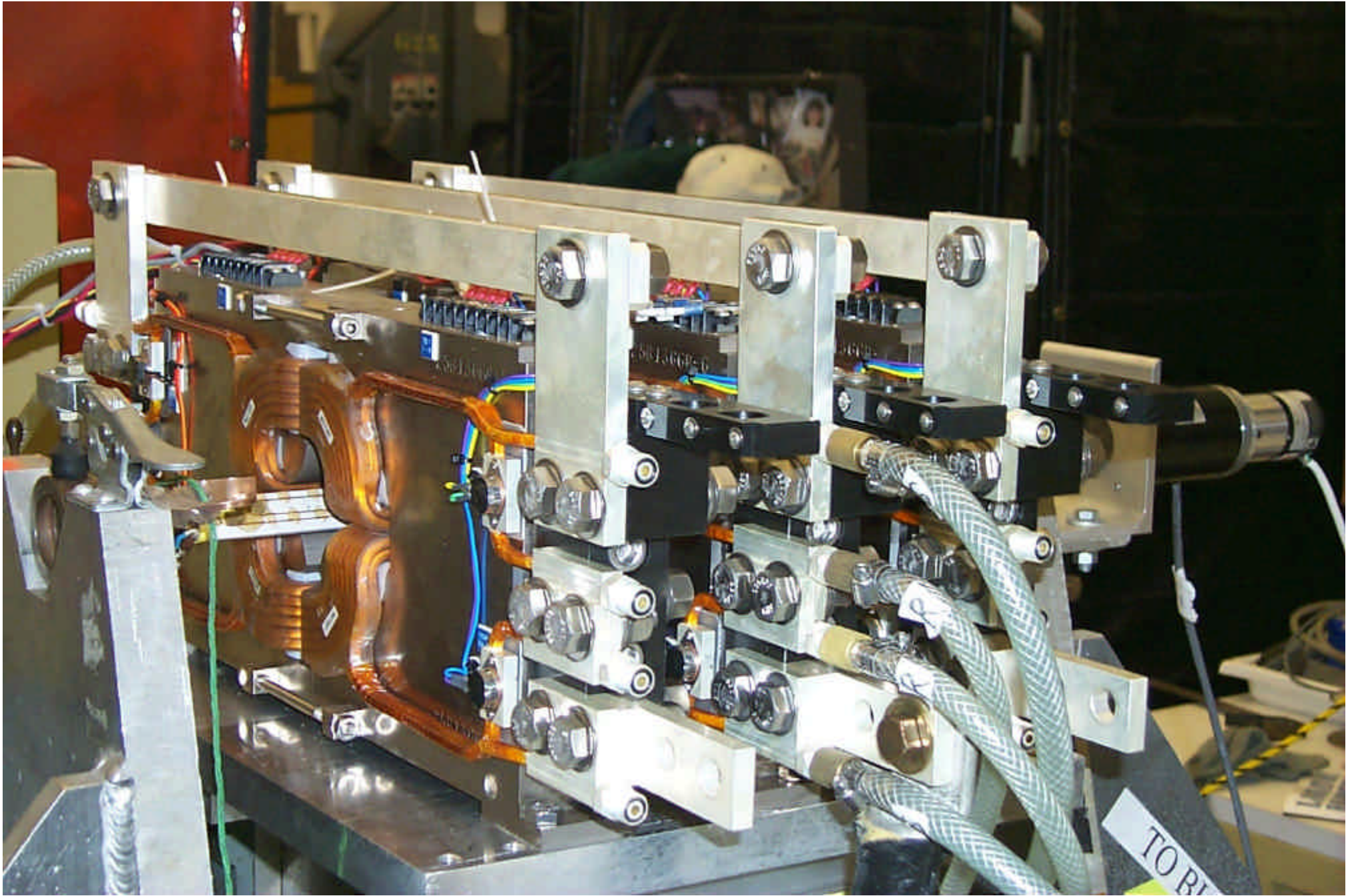




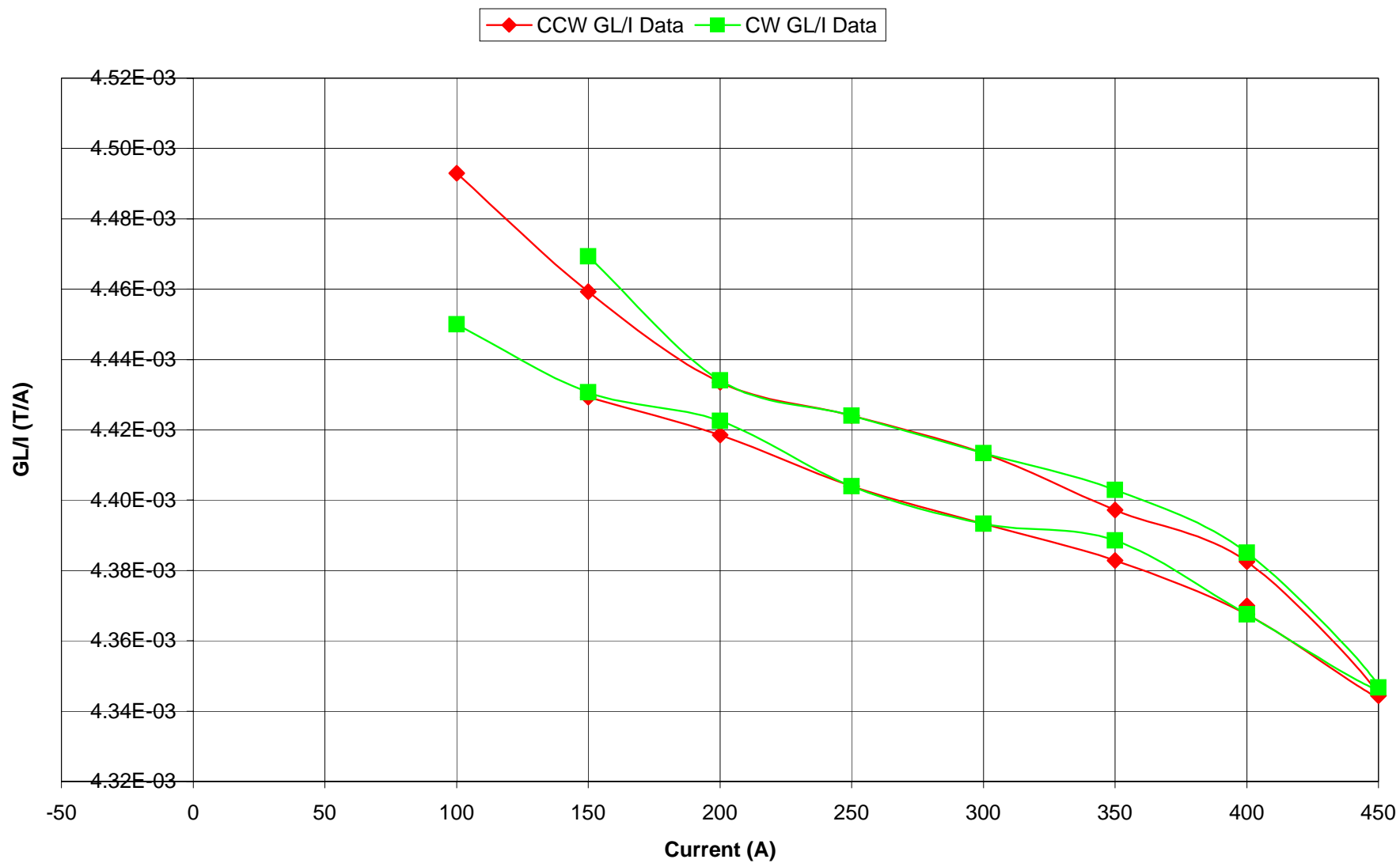
Q32_7: Effect of Disassembly On Sextupole Field



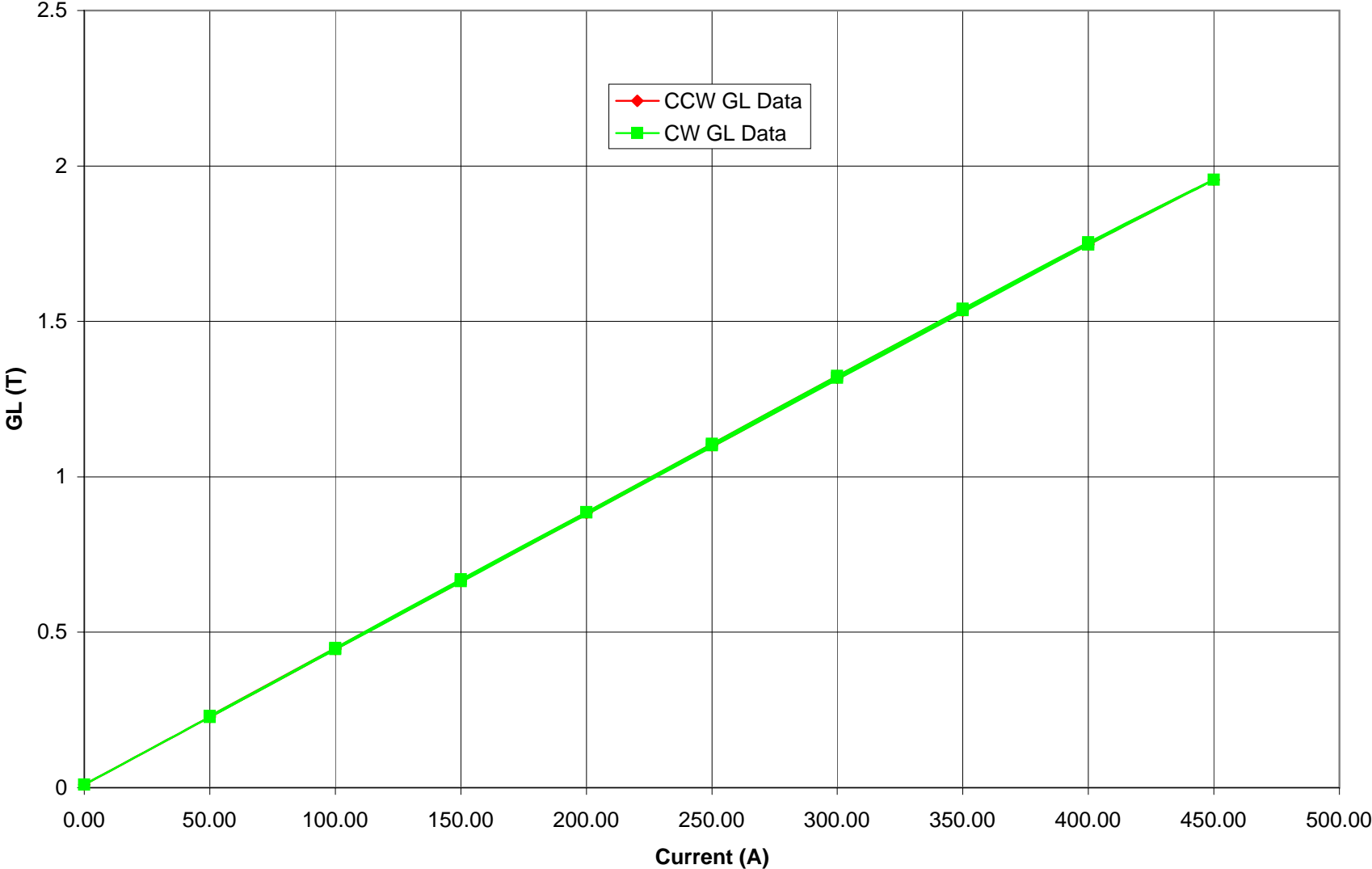
	1	2	3	4	5
Before Disassembly	0.004%	0.008%	0.010%	0.010%	0.009%
After Disassembly	0.006%	0.010%	0.008%	0.007%	0.010%



GL/I vs. I



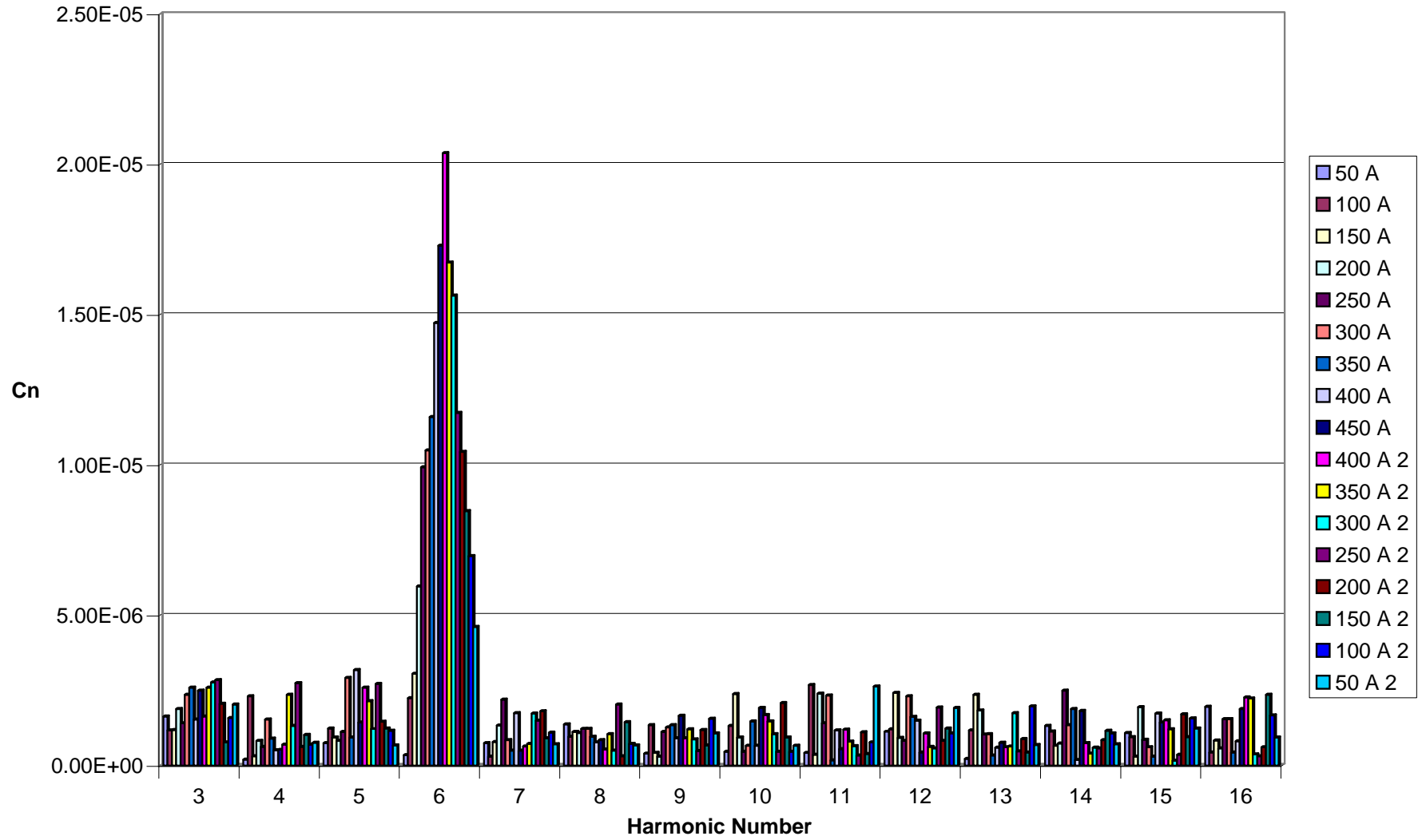
GL vs. Current



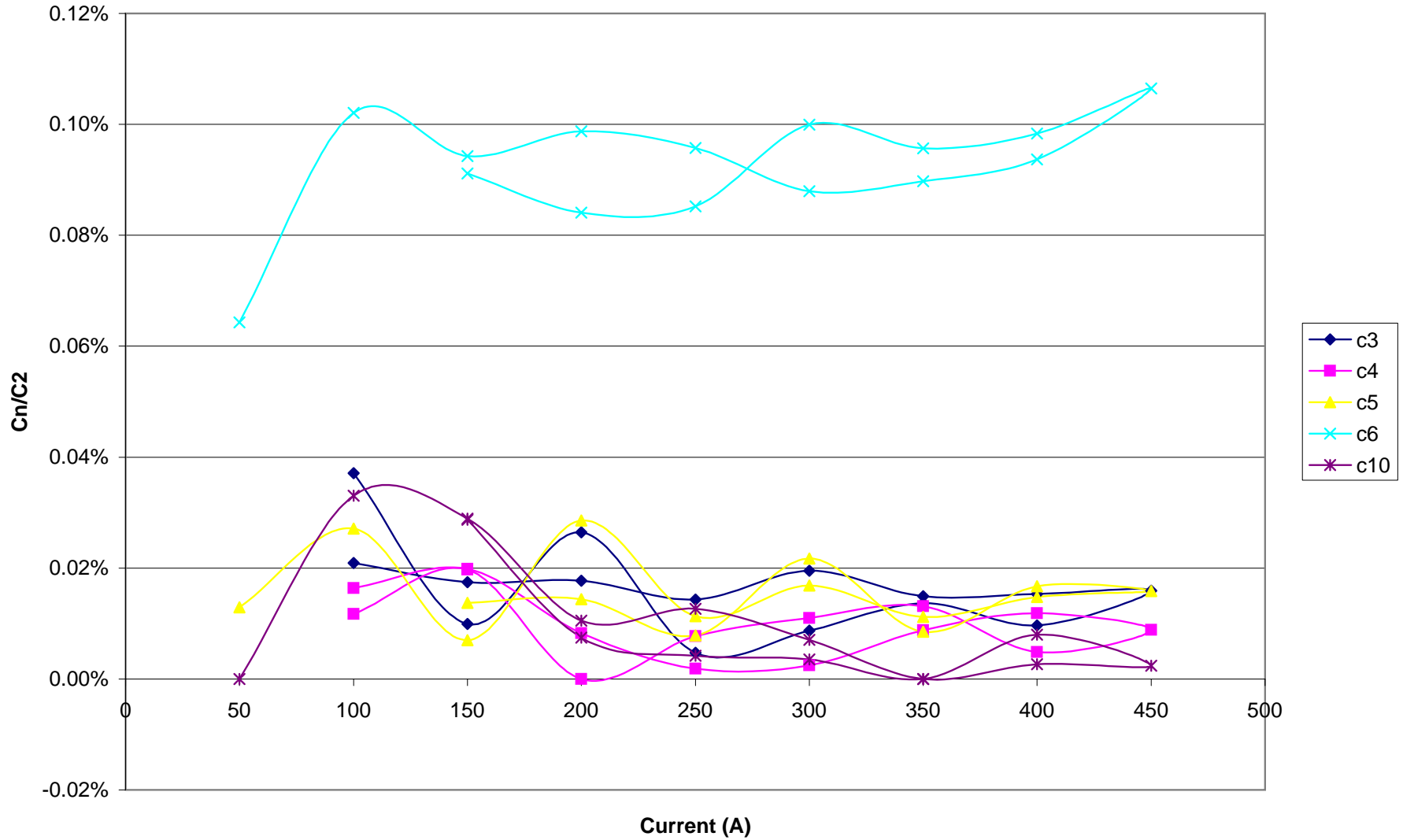
CCW Data

I (A)	GL (T)	Predicted I (A)	Difference	Predicted GL(T)
400	1.748	377.4947	0.943737	1.85162
0				
50				
100				
150	0.6644	142.1476	0.947651	0.700554
200	0.8837	189.7774	0.948887	0.930768
250	1.101	236.9728	0.947891	1.160981
300	1.318	284.103	0.94701	1.391194
350	1.534	331.0161	0.94576	1.621407
400	1.747	377.2775	0.943194	1.85162
450	1.955	422.4531	0.938785	2.081833
400	1.753	378.5807	0.946452	1.85162
350	1.539	332.102	0.948863	1.621407
300	1.324	285.4062	0.951354	1.391194
250	1.106	238.0587	0.952235	1.160981
200	0.8867	190.429	0.952145	0.930768
150	0.6689	143.125	0.954167	0.700554
100	0.4493	95.43007	0.954301	0.470341
50				
average =			94.816%	

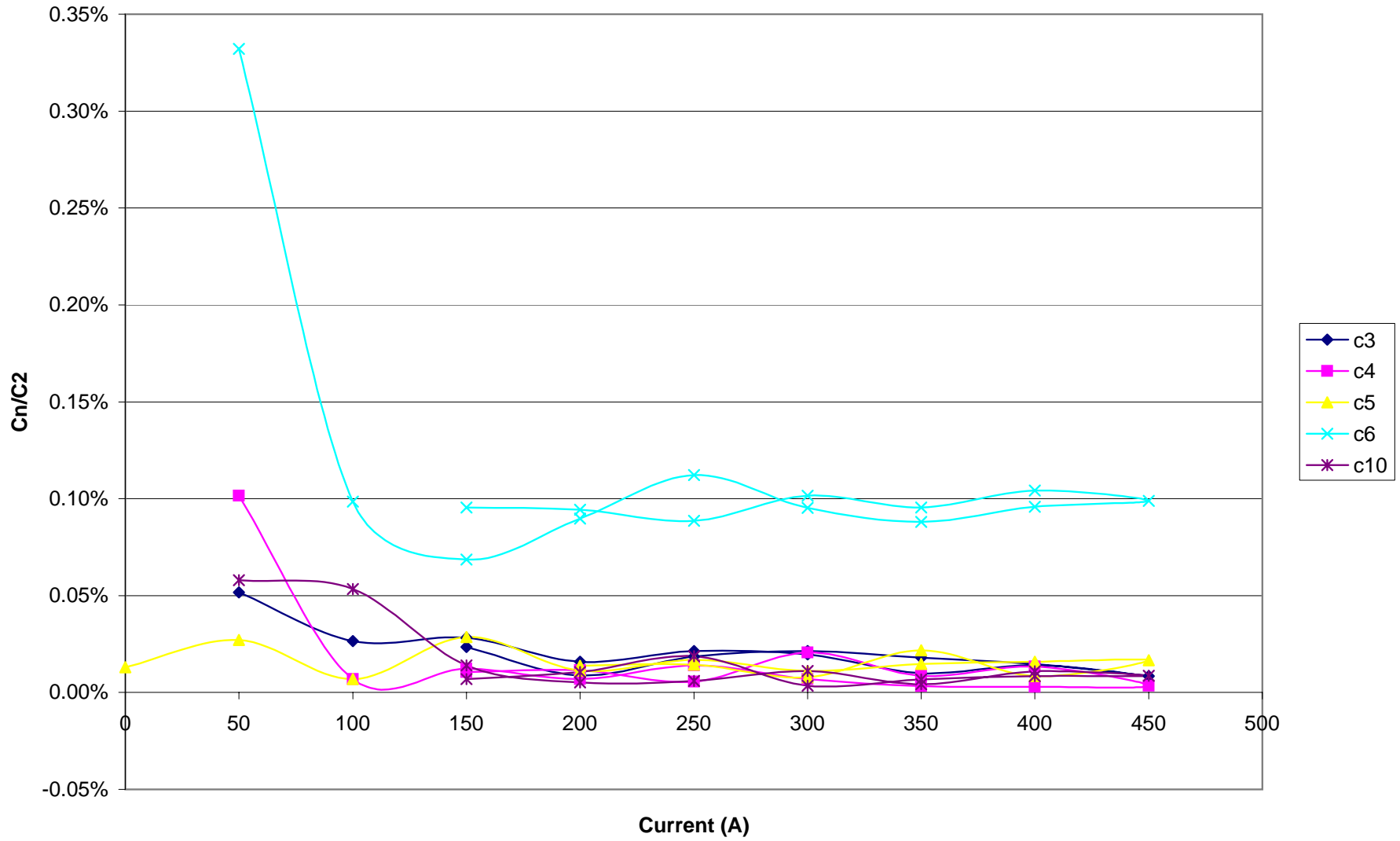
Field Multipoles over all current range: 50-450-50 A



CCW cn vs current



CW cn vs current



magnet 25B1346 B-1 Rcoil = 0.01 m

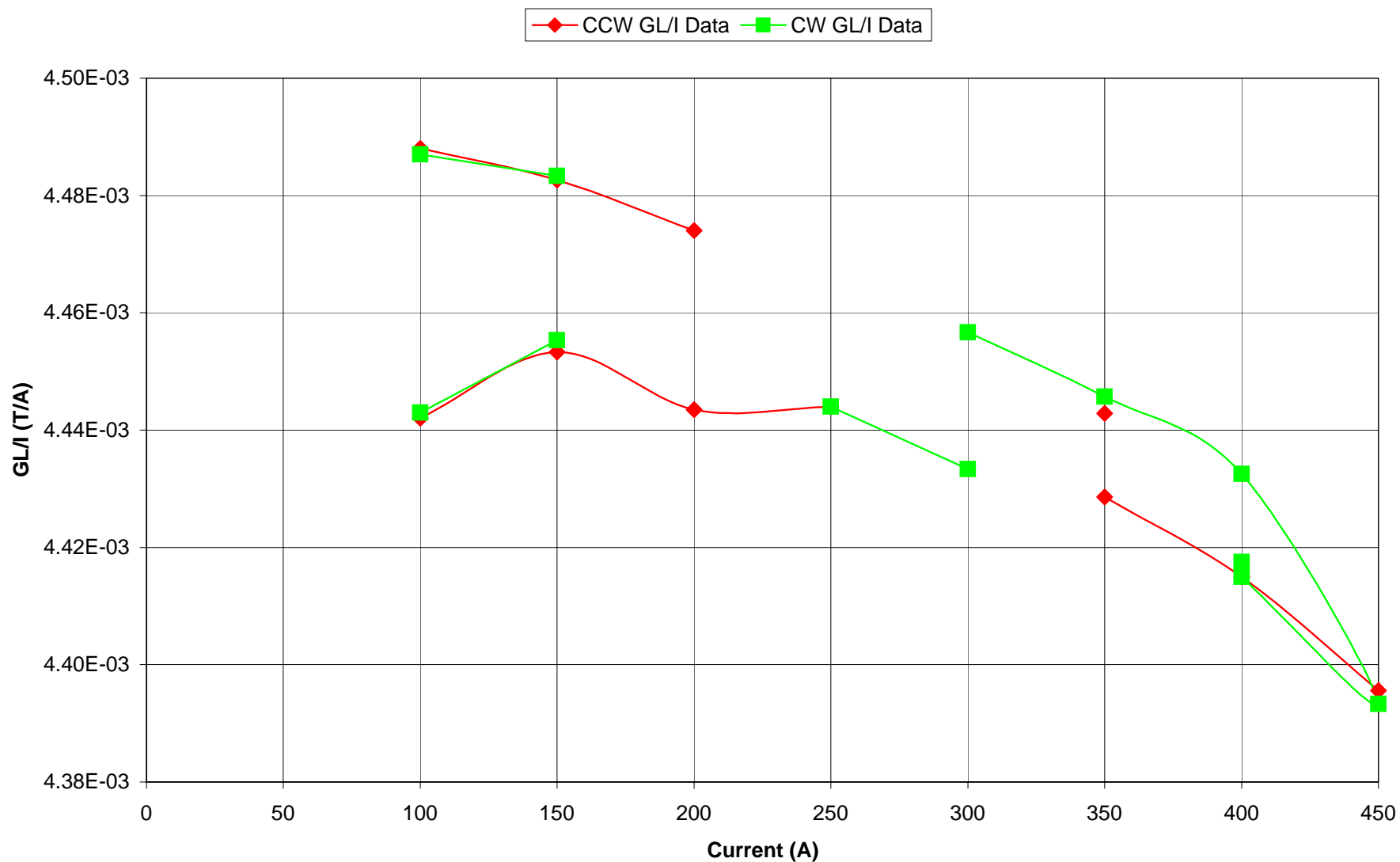
Table with columns: Raw CW Data, data file, current (A), Q5_1.dat, Q5_2.dat, Q5_3.dat, Q5_4.dat, Q5_5.dat, Q5_6.dat, Q5_7.dat, Q5_8.dat, Q5_9.dat, Q5_10.dat, Q5_11.dat, Q5_12.dat, Q5_13.dat, Q5_14.dat, Q5_15.dat, Q5_16.dat, Q5_17.dat, Q5_18.dat, Q5_19.dat. Rows represent current levels from cn = 1 to cn = 16.

Table with columns: Normalized Data, Data file, current (A), c2 (Tm), GL (T), cn/c2 (3-16), % Quadrupole, Norm GL/I (T/A), Current (A). Rows include data for Q5_1.dat to Q5_19.dat and an Average Data summary row.

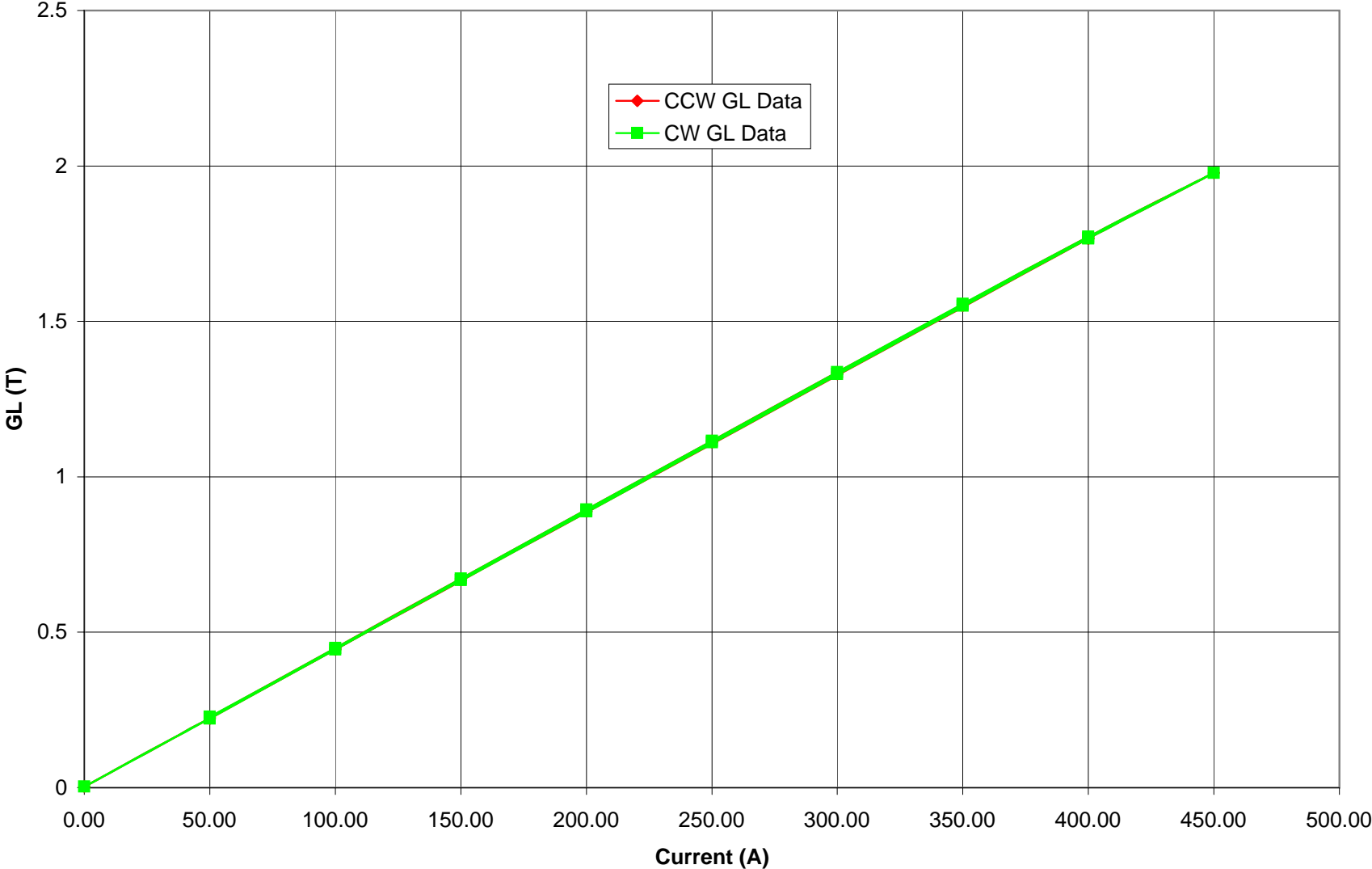
Table with columns: Good Data Only, Data file, current (A), c2 (Tm), GL (T), cn/c2 (3-16), % Quadrupole, Norm GL/I (T/A), Current (A). Rows include data for Q5_1.dat to Q5_19.dat with highlighted rows for Q5_2.dat through Q5_16.dat.

Summary table with columns: n, Average Data, and values for c2/cn/c2 ratios (0.01% to 0.10%) and % Quadrupole (99.73%).

GL/I vs. I



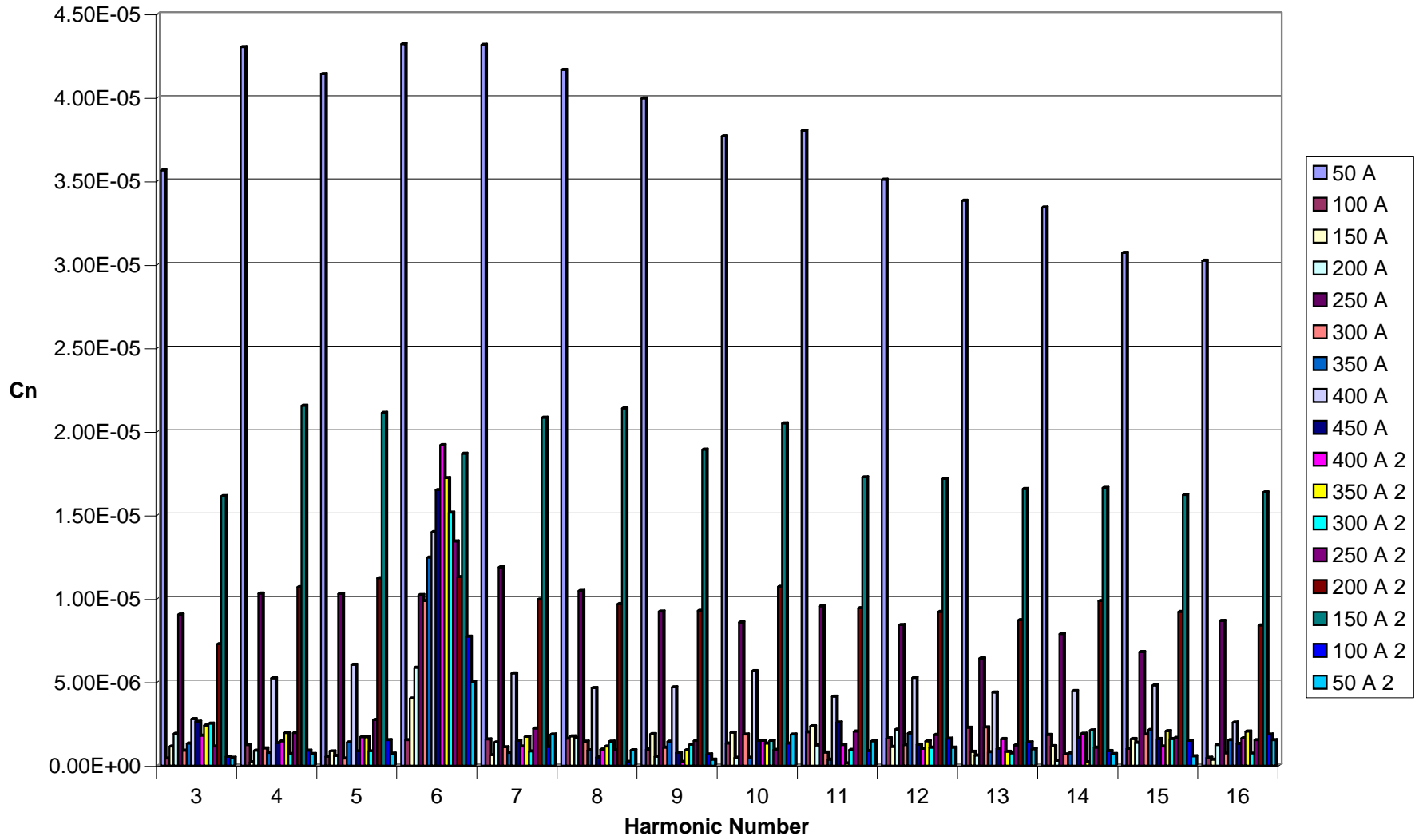
GL vs. Current



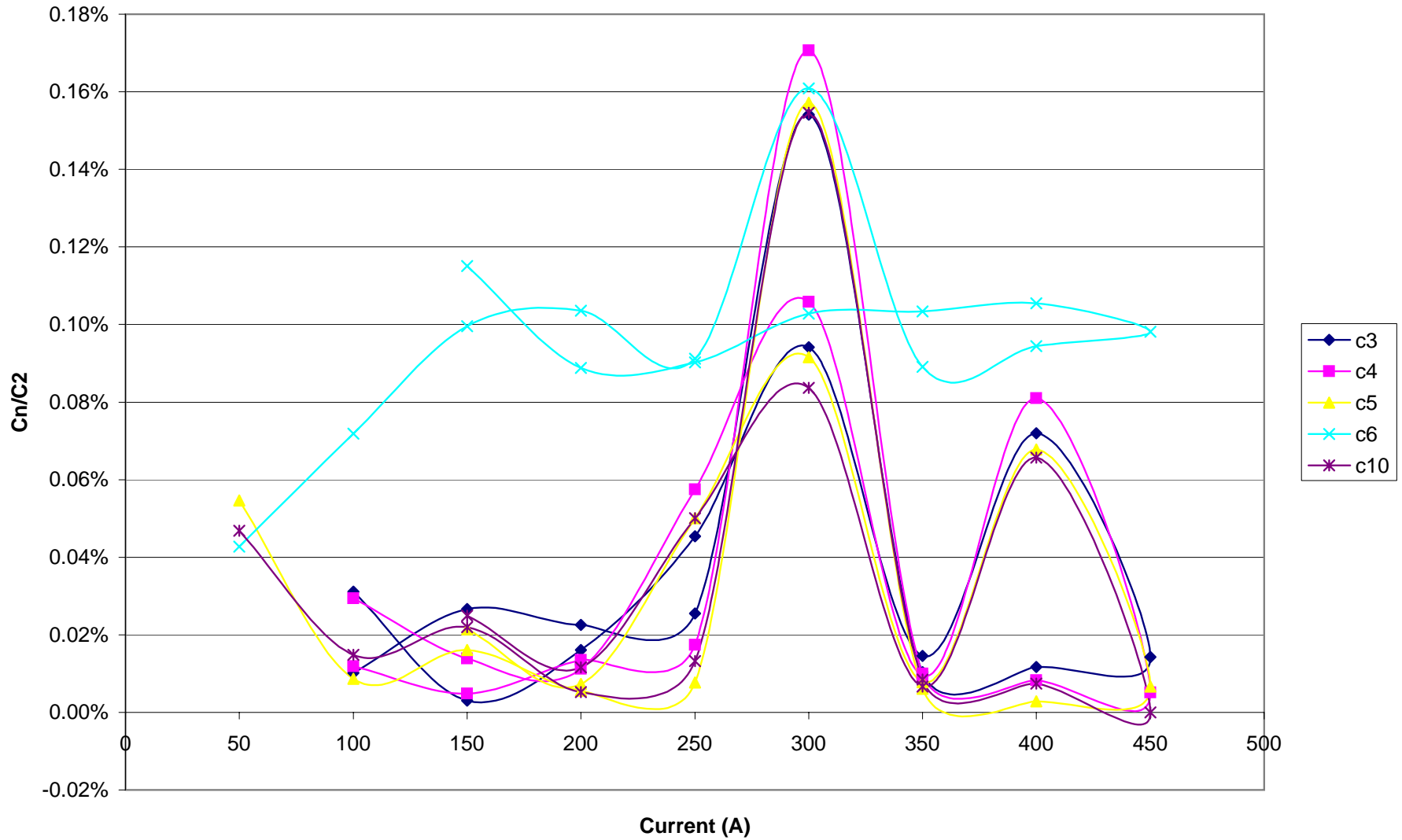
CCW Data

I (A)	GL (T)	Predicted I (A)	Difference	Predicted GL(T)
400	1.766	381.4041	0.95351	1.85162
0				
50				
100	0.4442	94.3224	0.943224	0.470341
150	0.668	142.9295	0.952863	0.700554
200	0.8887	190.8634	0.954317	0.930768
250	1.111	239.1447	0.956579	1.160981
300				
350	1.55	334.4911	0.955689	1.621407
400	1.766	381.4041	0.95351	1.85162
450	1.978	427.4484	0.949885	2.081833
400				
350	1.555	335.5771	0.958792	1.621407
300				
250				
200	0.8948	192.1882	0.960941	0.930768
150	0.6724	143.8852	0.959234	0.700554
100	0.4488	95.32147	0.953215	0.470341
50				
average =			95.431%	

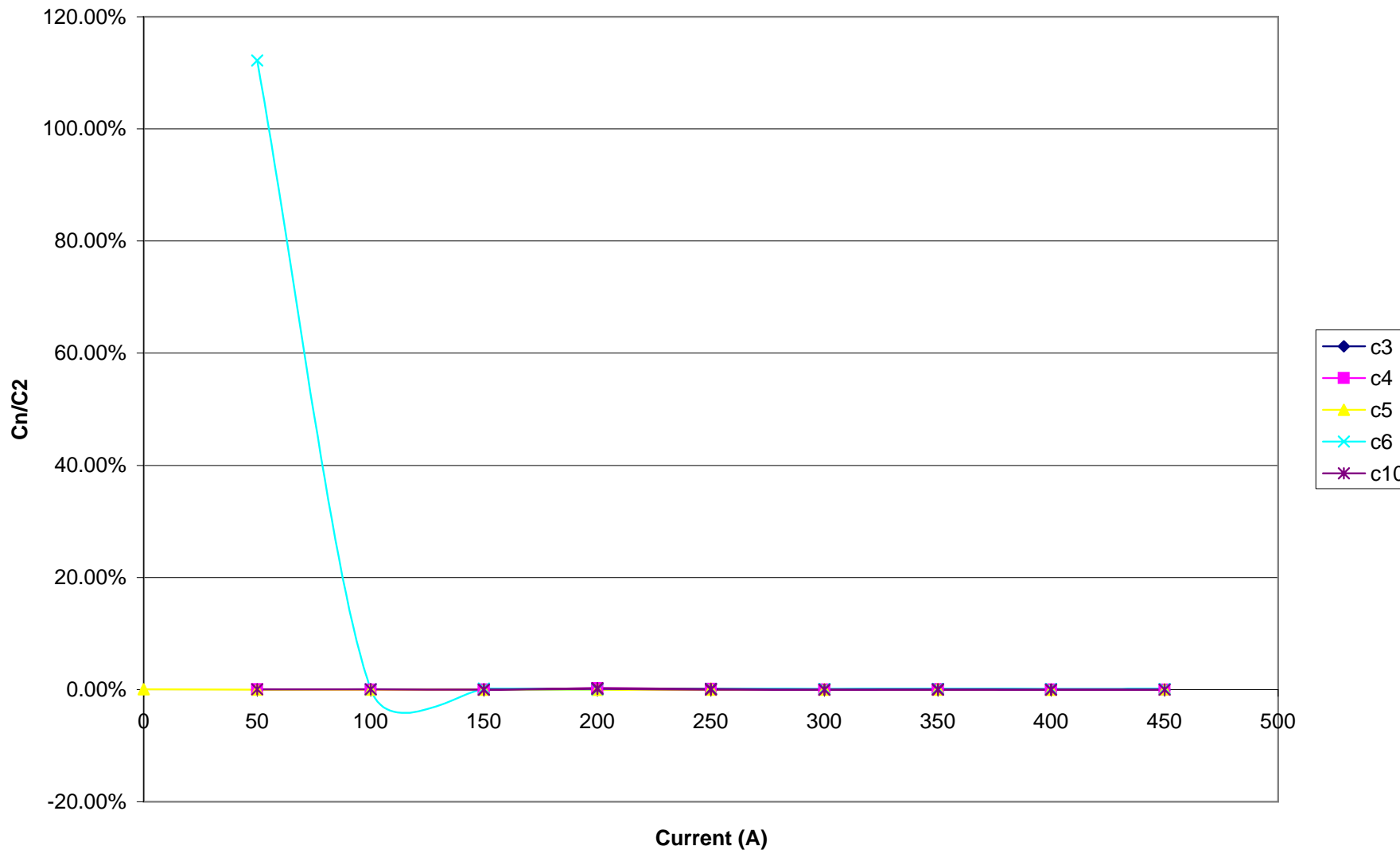
Field Multipoles over all current range: 50-450-50 A

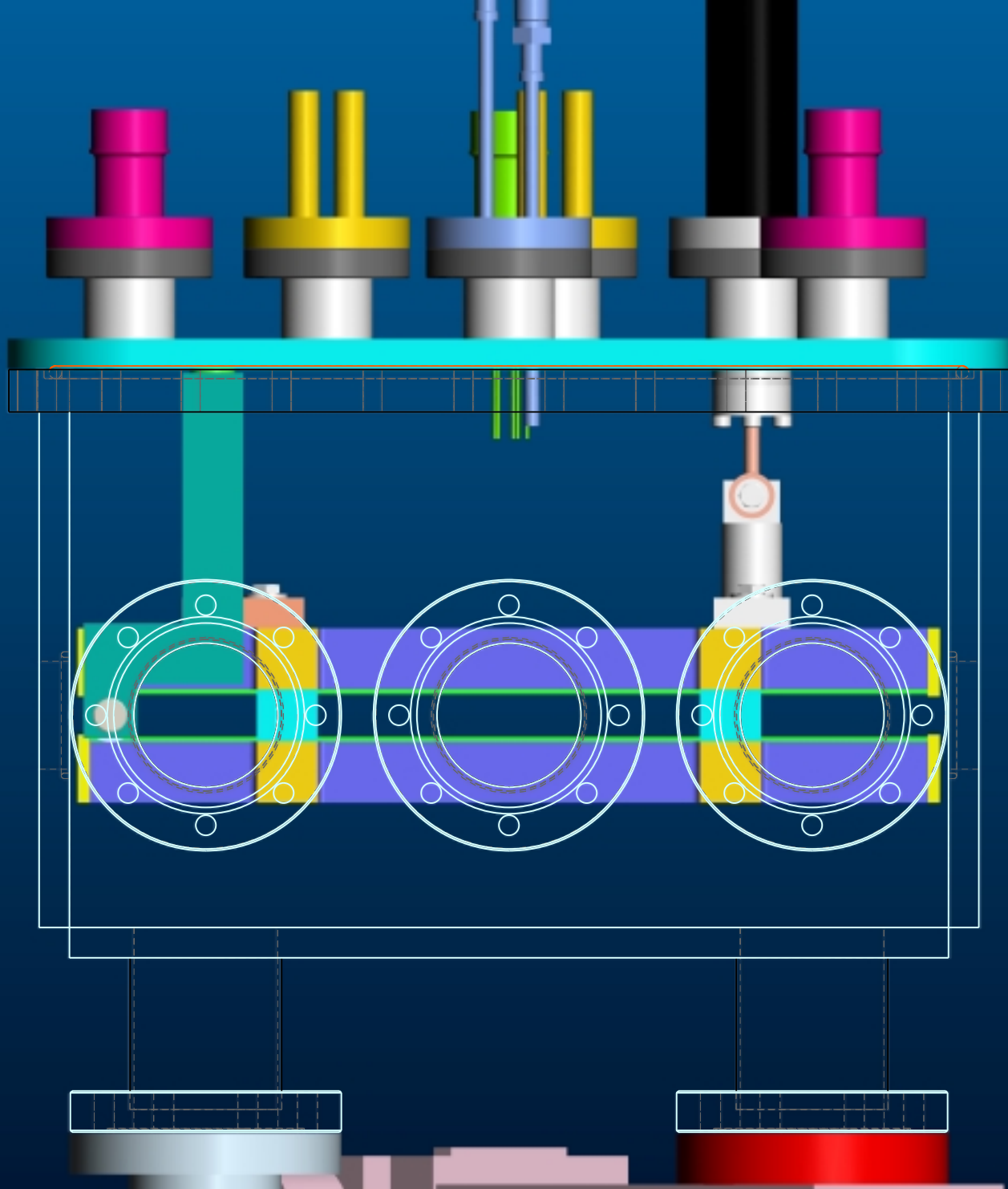


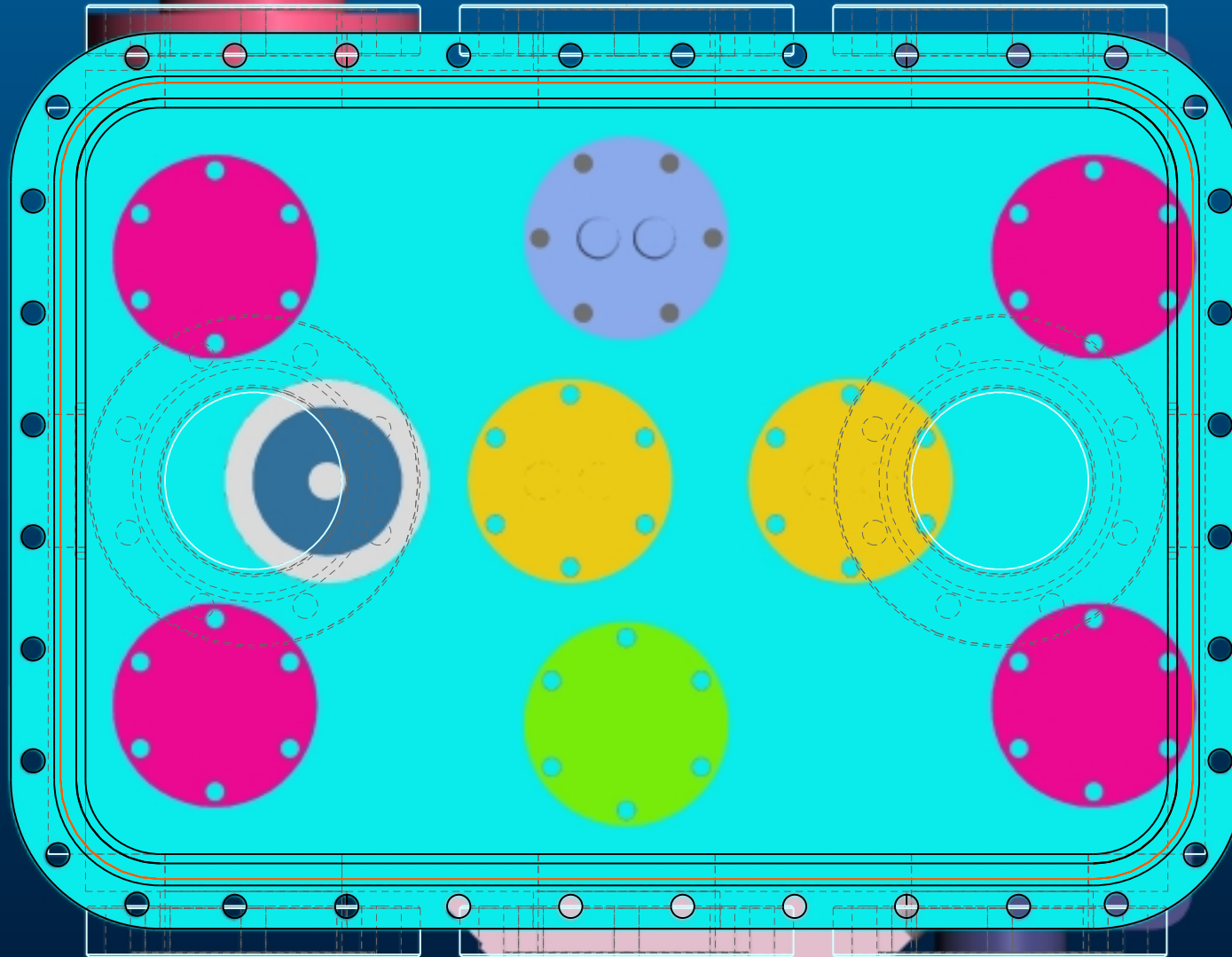
CCW cn vs current

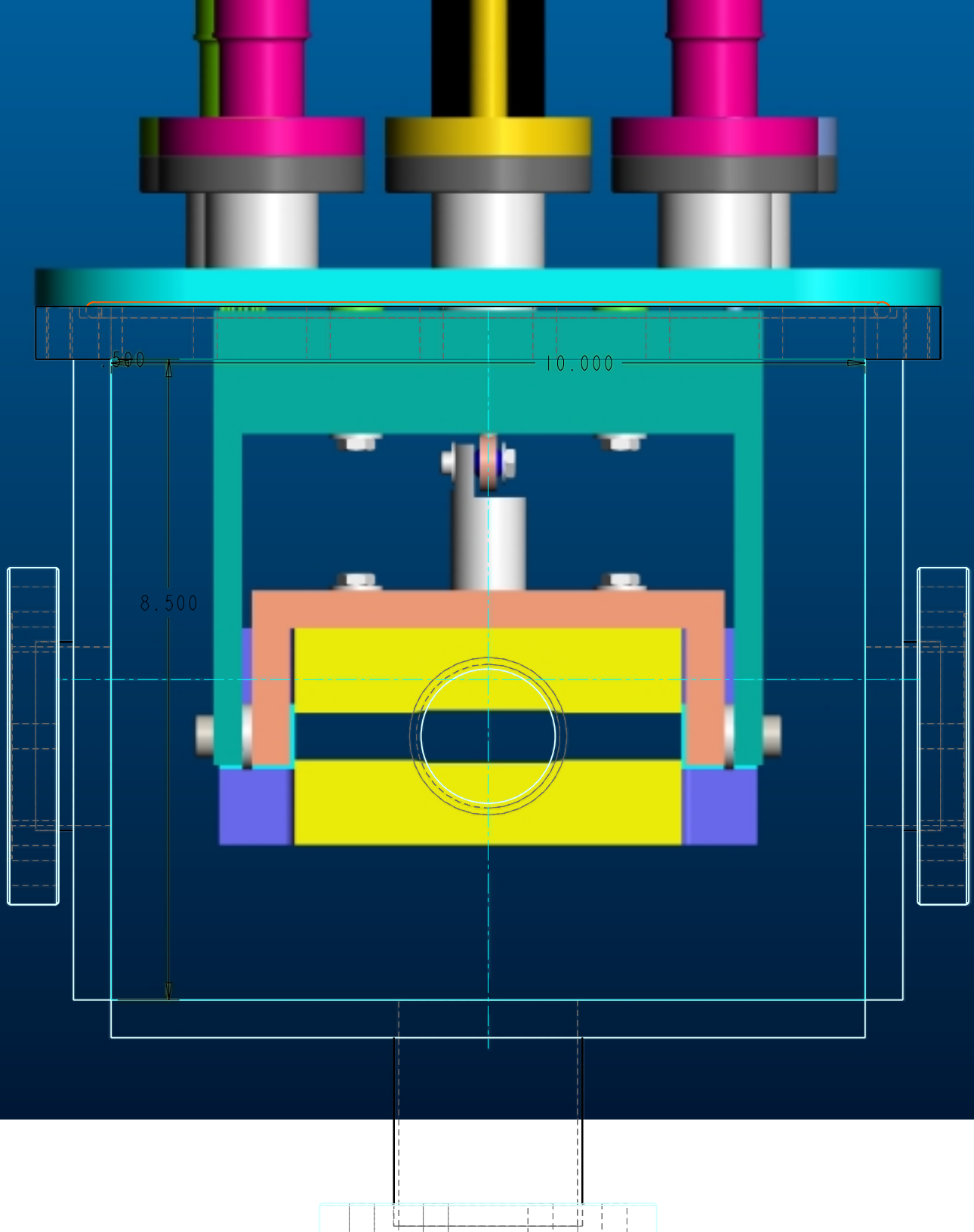


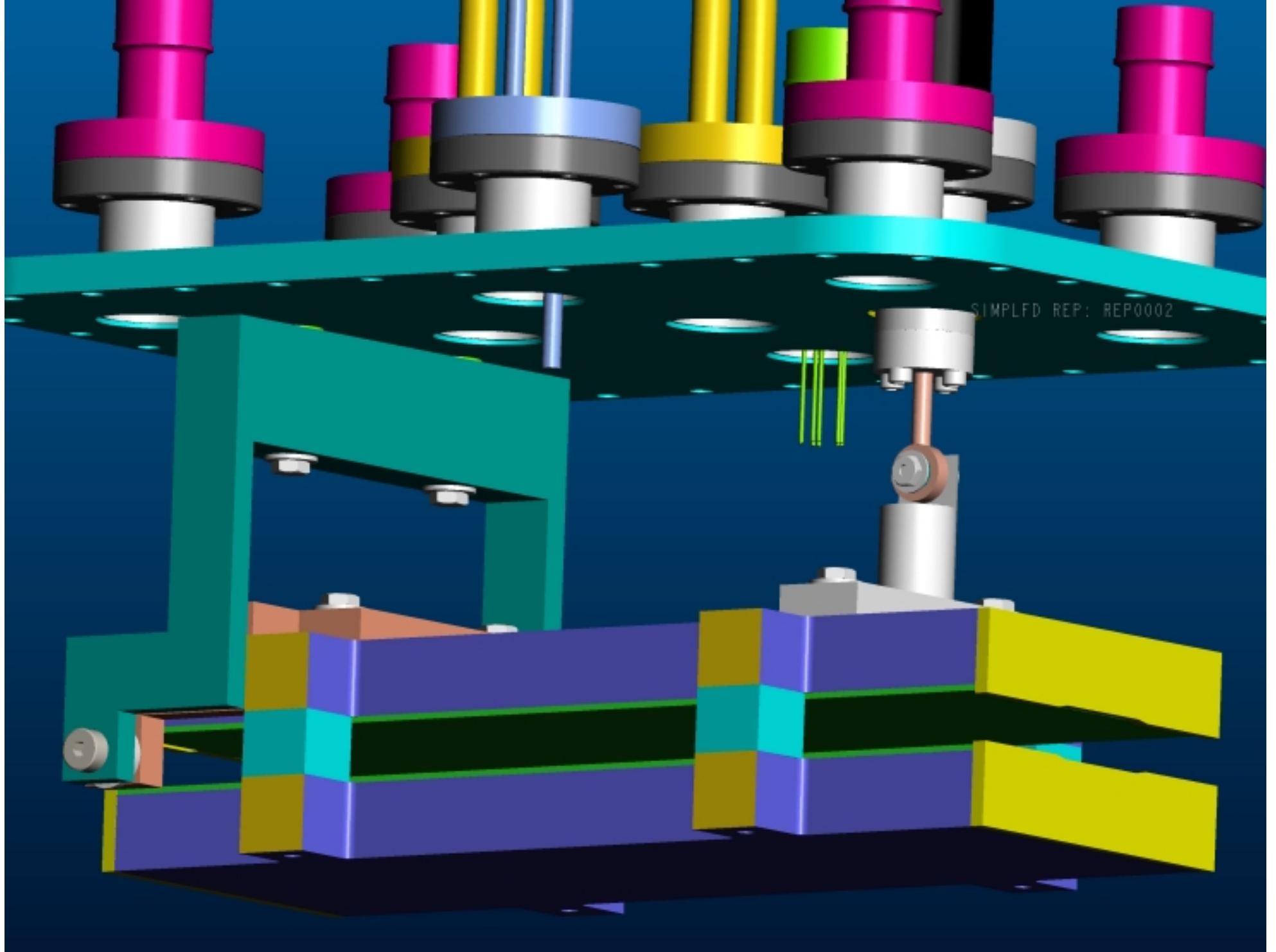
CW cn vs current

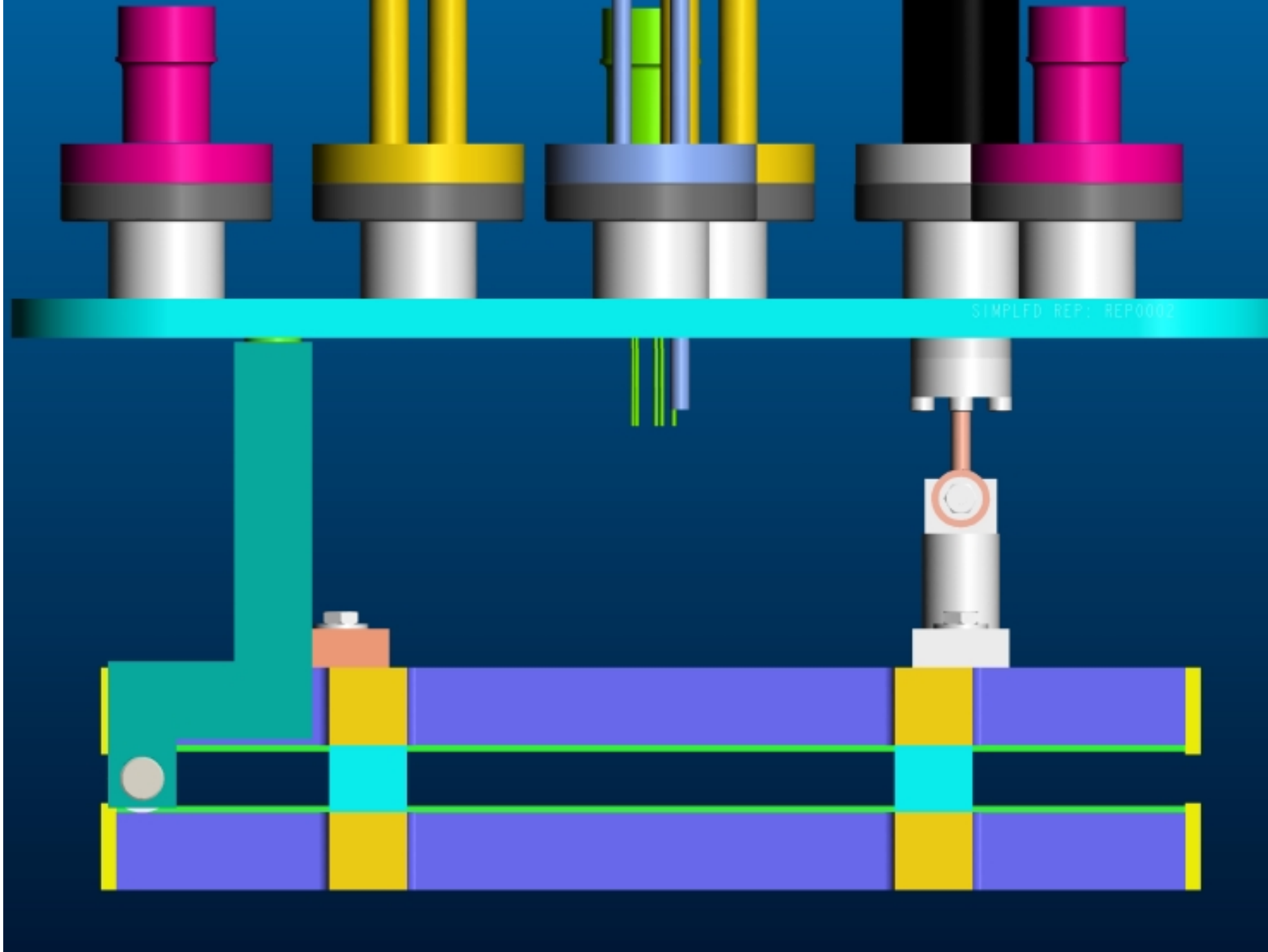


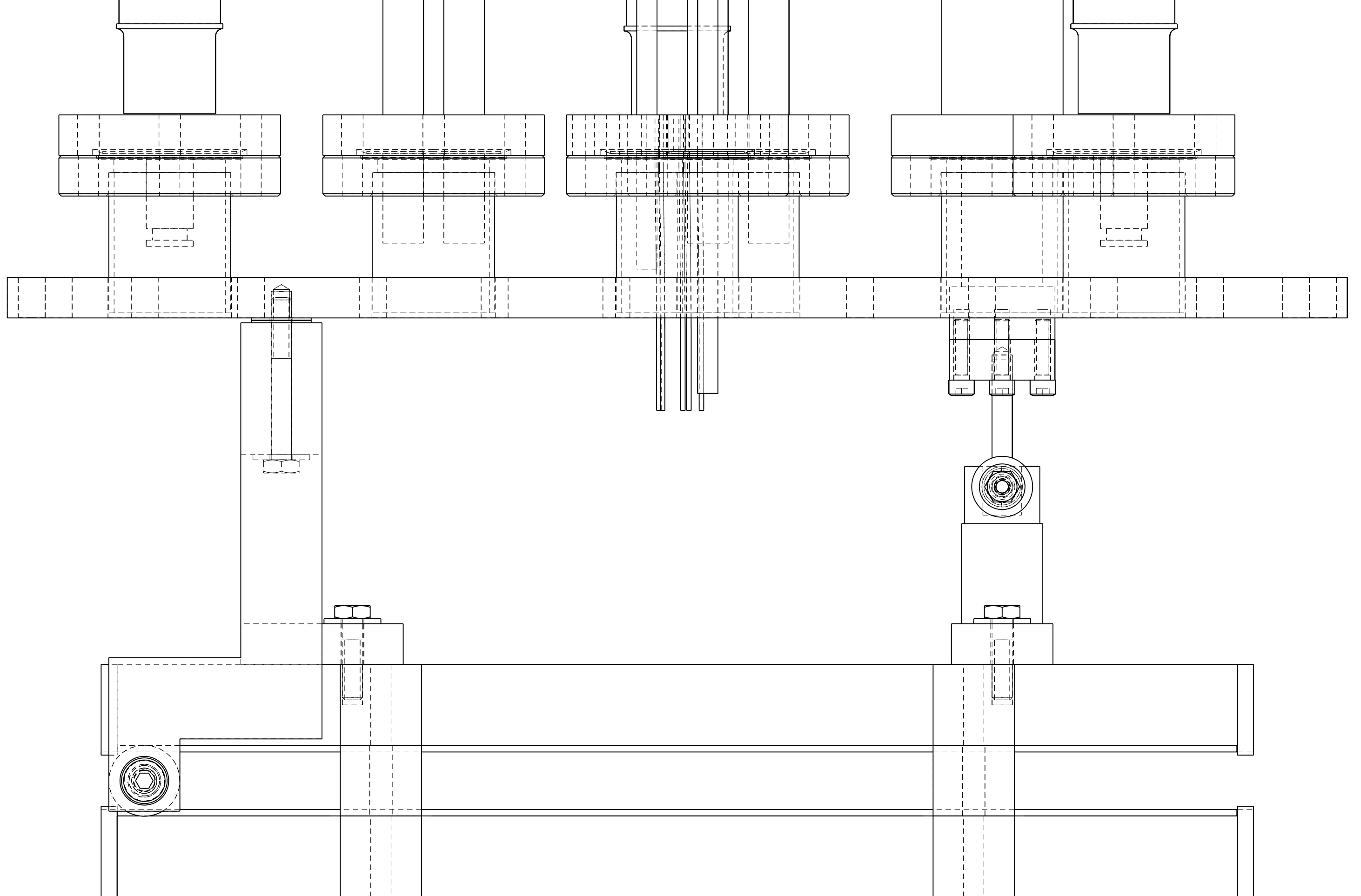


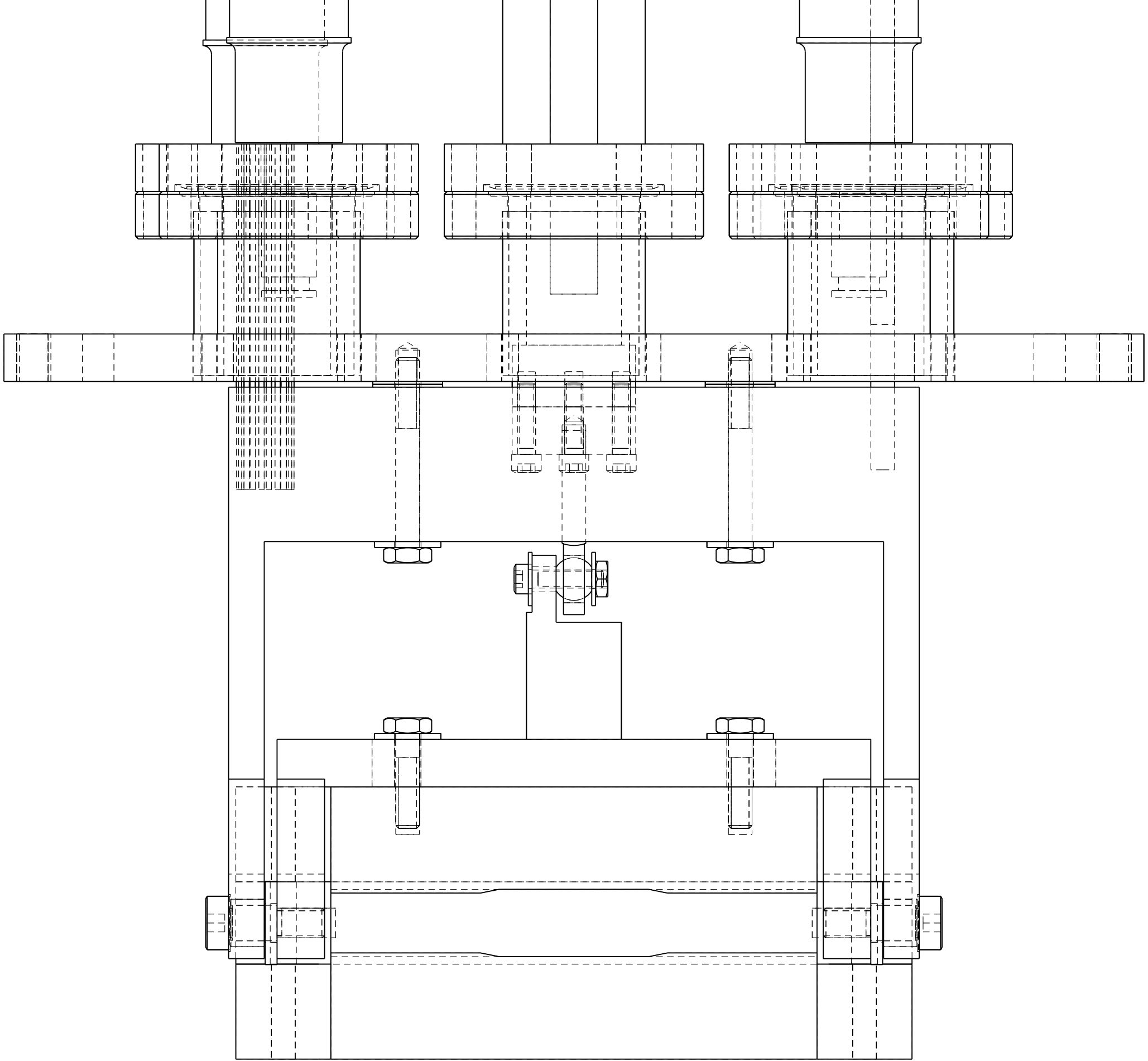


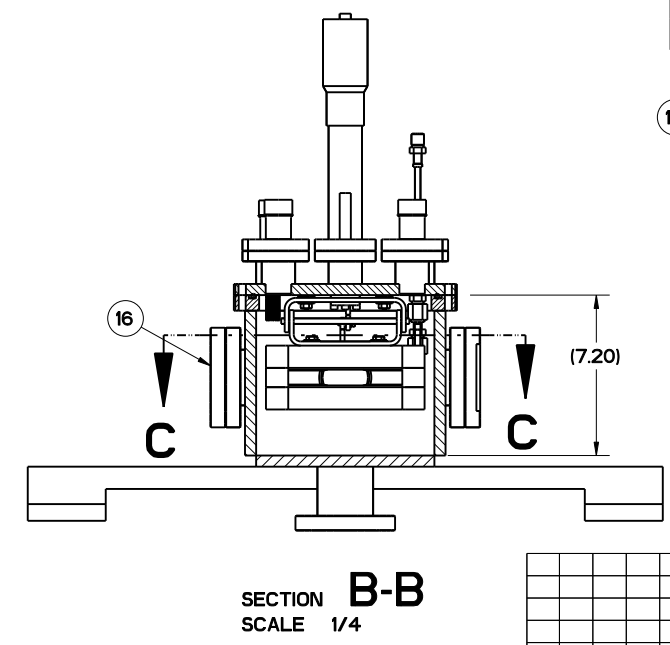
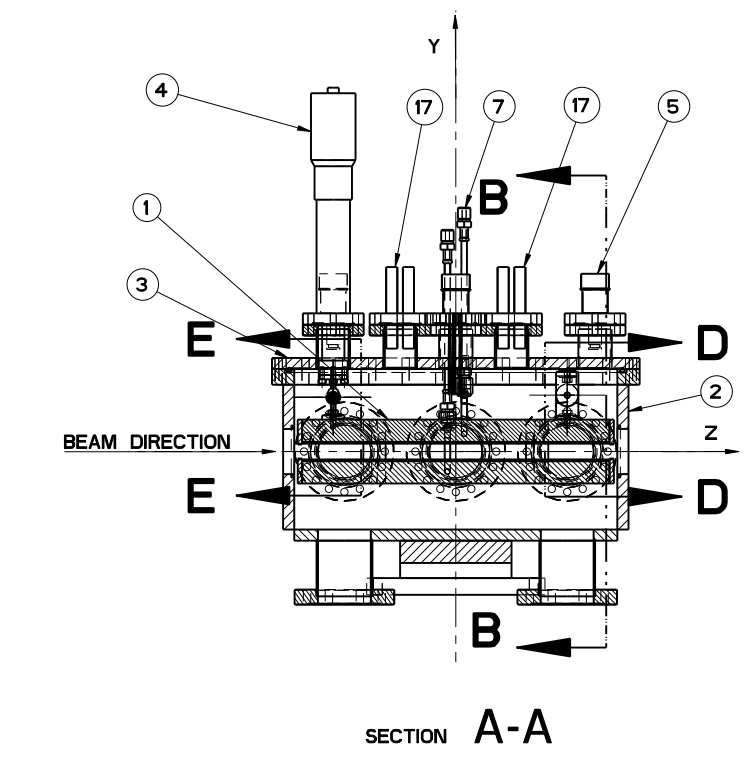
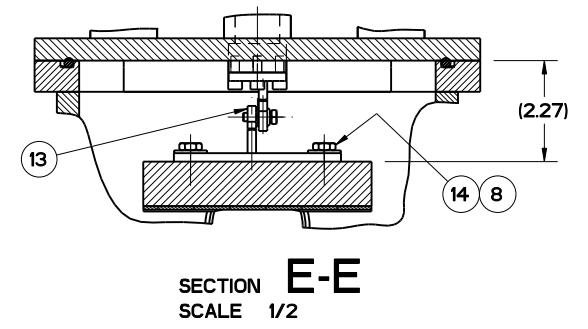
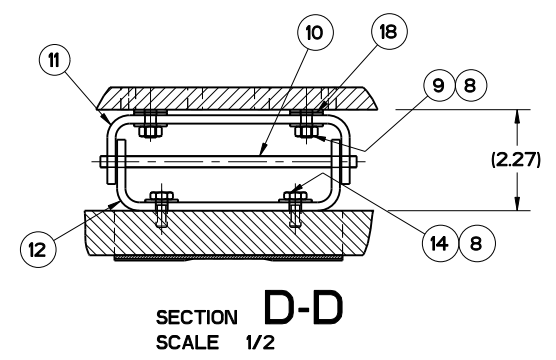
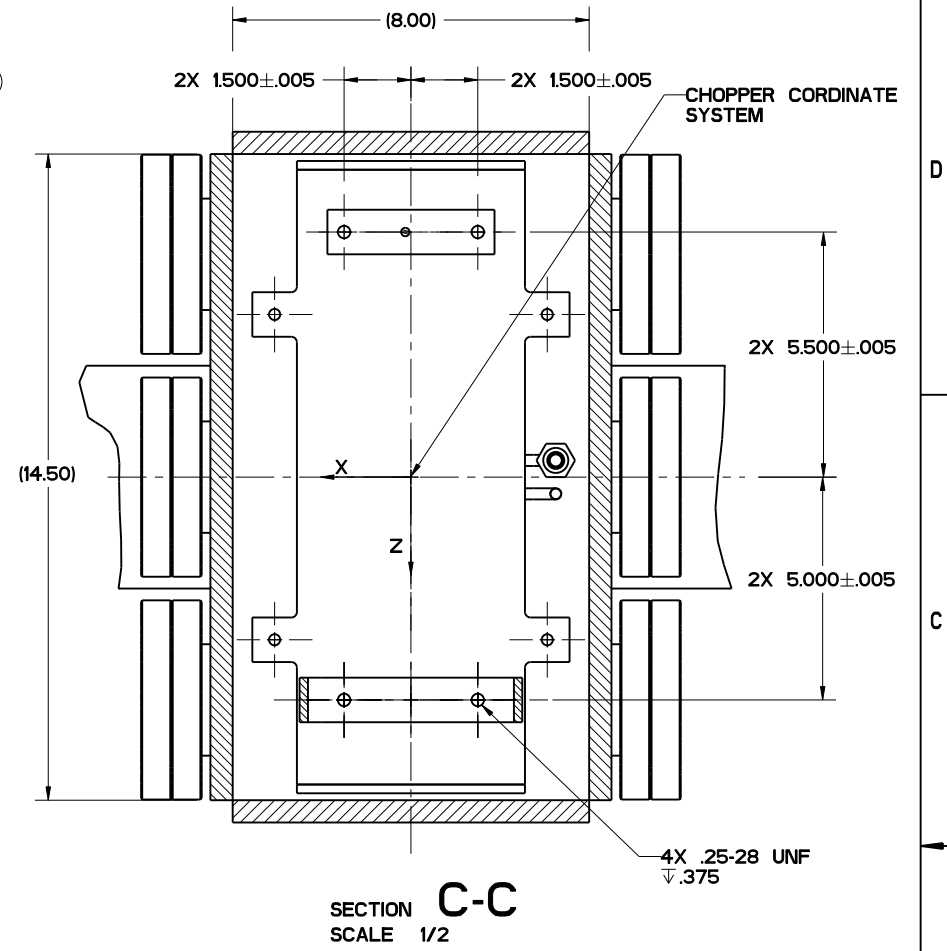
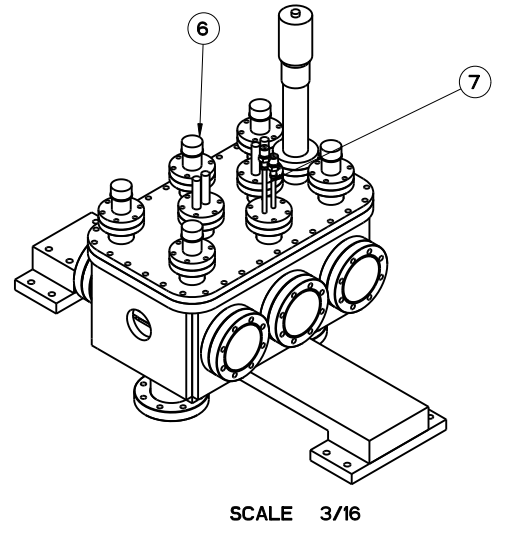
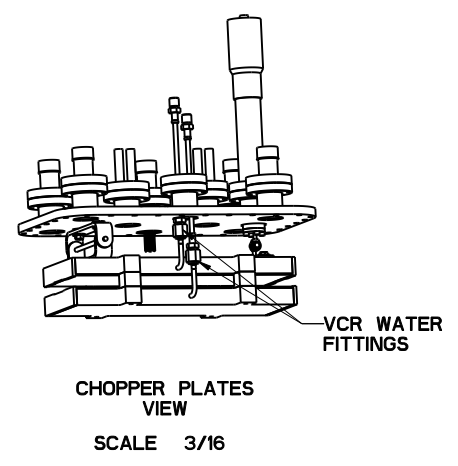
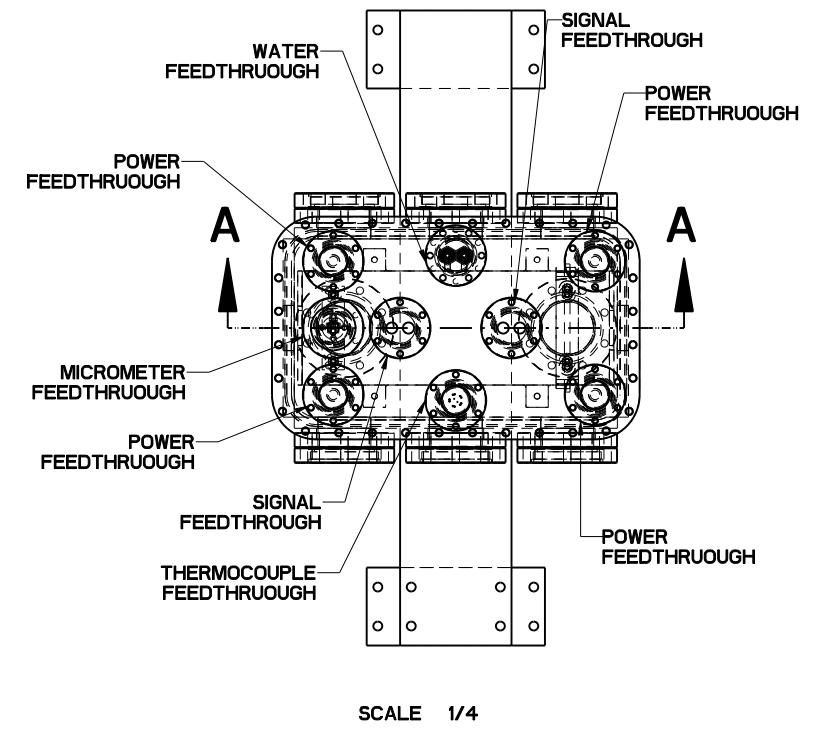












ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
18	4		SHIM SUSPENSION	
17	no/xxx	2	SIGNAL FEEDTHROUGH	
16	no/xxx	6	4 1/2 CONFLAT VIEW PORT	
14		4	HEX. HD. BOLT .25-28 UNF 2A, .75	
13	no/xxx	1	GIMBAL ASSEMBLY	
12	no/xxx	1	INNER PIVOT BRACKET	
11	no/xxx	1	OUTER PIVOT BRACKET	
10	no/xxx	1	PIVOT SHAFT	
9		2	HEX. NUT .25-28 UNF 2B	
8		6	WASHER .25 NOM	
7	no/xxx	1	WATER FEEDTHROUGH	
6	no/xxx	1	THERMOCOUPLE FEEDTHROUGH	
5		4	POWER FEEDTHROUGH (LANL)	
4	no/xxx	1	CHOPPER MICROMETER FEEDTHROUGH	
3	no/xxx	1	COVER ASSEMBLY	
2	no/xxx	1	CHOPPER BOX WELDMENT	
1	no/xxx	1	CHOPPER PLATES ASSY (LANL)	

REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED
 PROJECTION:
 XX ± .01 FRAC ± 1/84
 XXX ± .003 Angles ± 10'
 XXXX ± .000 FINISH 1/2
 DO NOT SCALE PRINT
 TRENDS ARE CLASS 2
 CHAMFER ENDS OF ALL SCREW TRENDS 30°
 CUT ROUND, IS THREAD RELIEF ON MACHINED THREADS
 BREAK EDGES .016 MAX. ON MACHINED WORK
 REMOVE BURRS, WELD SPATTER & LOOSE SCALE
 IN ACCORDANCE WITH ASME Y14.5 & D91

SHOP ORDERS

ACT NO.	NO.	DATE	REV.

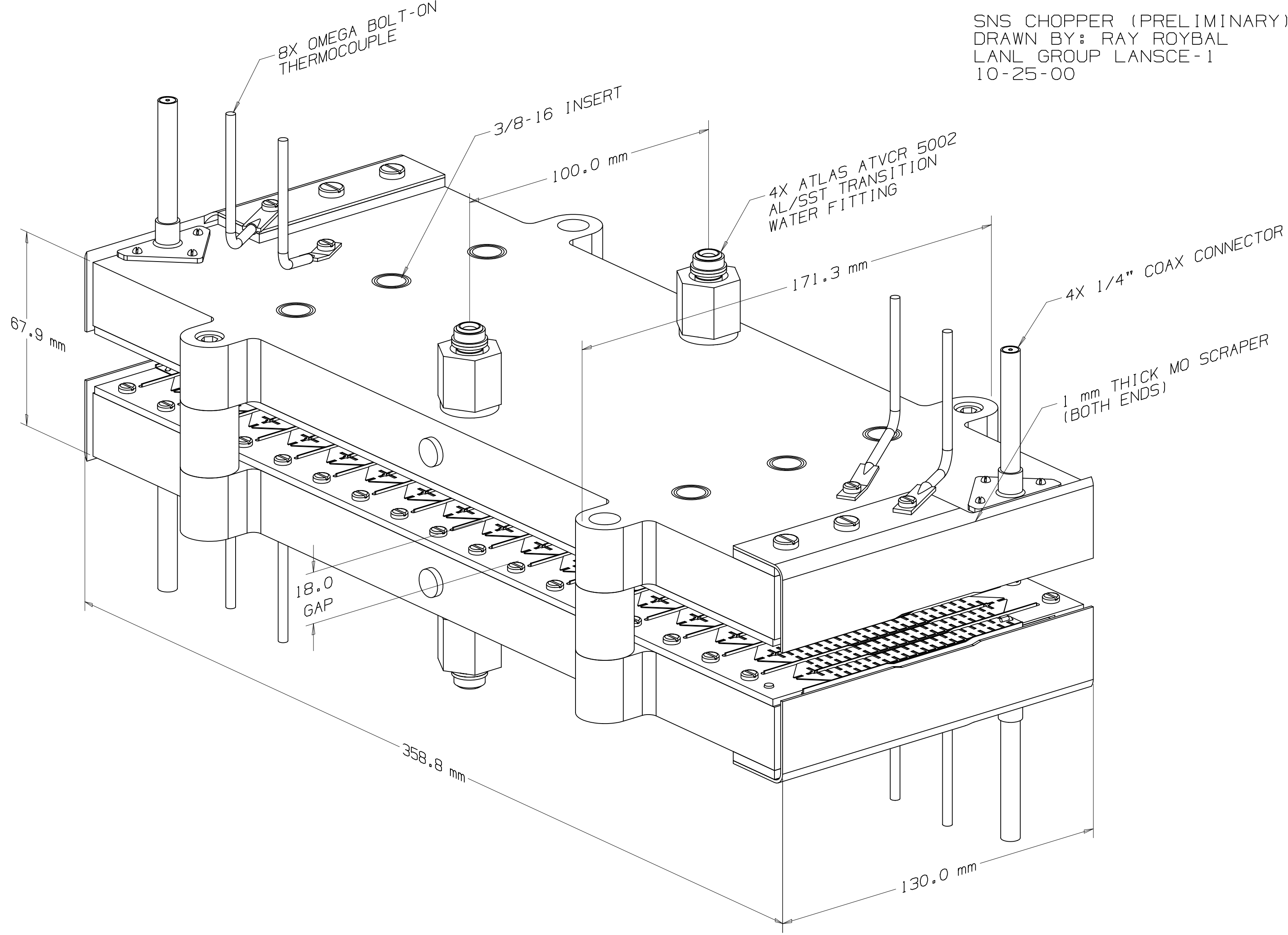
ERNEST ORLANDO LAWRENCE
 BERKELEY NATIONAL LABORATORY
 UNIVERSITY OF CALIFORNIA - BERKELEY

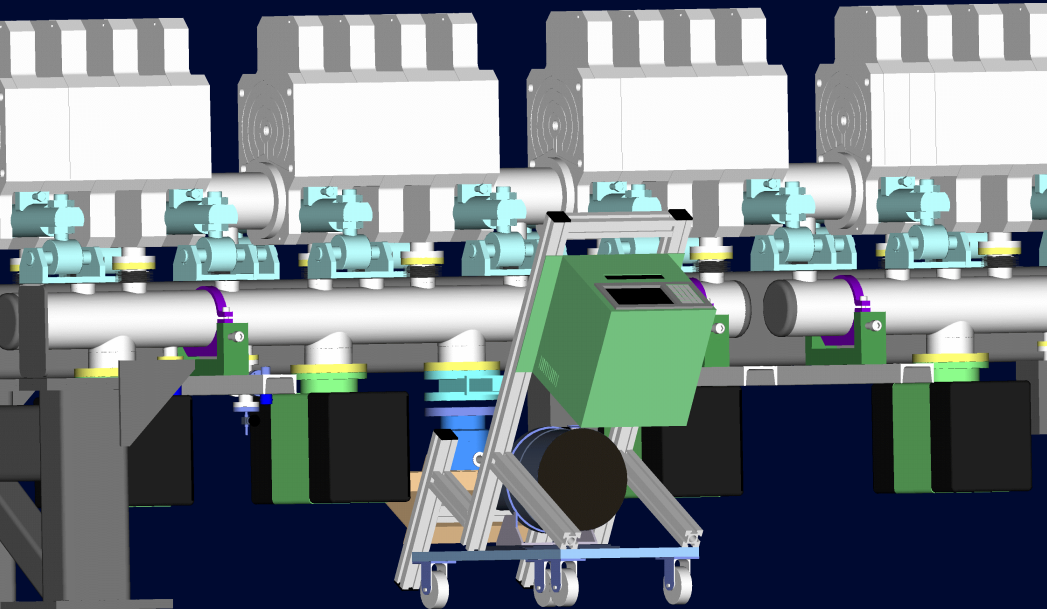
SNS - FE MEBT
 BEAM TRANSPORTATION SYSTEMS
 CHOPPER ASSEMBLY INTERFACE

SCALE 1/4
 SHEET 1 OF 1
 DWG. NO. 25B4204
 CATEGORY CODE FE3312
 SIZE B

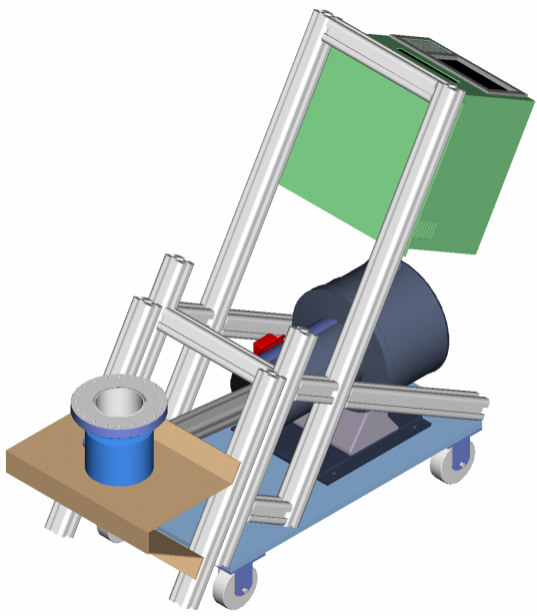
APPROVED: DATE: 25-Sep-00
 CHECKED: None DATE:
 DESIGNED: Andrew Zachoszcz DATE: 25-Sep-00
 DRAWN: Daryl Oshetz DATE:
 PATENT CLEAR:
 MICROFILMED:
 DOWNTOWN:
 ASSEM

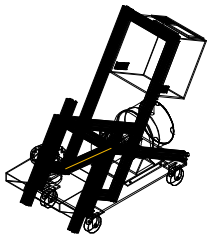
SNS CHOPPER (PRELIMINARY)
DRAWN BY: RAY ROYBAL
LANL GROUP LANSCE-1
10-25-00



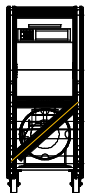






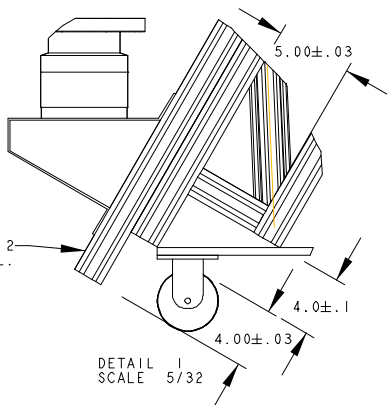


SCALE 3/64

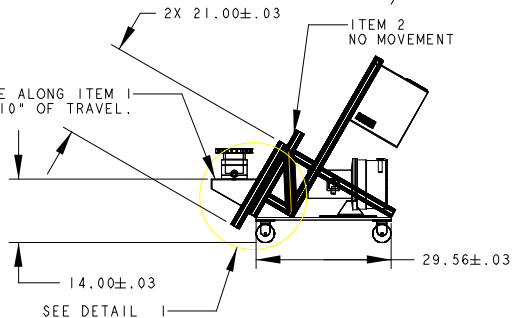


TURBO CART MODIFIED
 CART IS IN LOWER POSITION
 FOR USE WITH CCL SECTION.

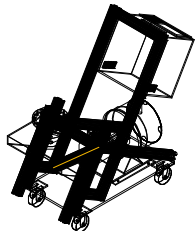
ITEM 1 WILL SLIDE ALONG ITEM 2
 WITH APPROX. 8" OF TRAVEL.



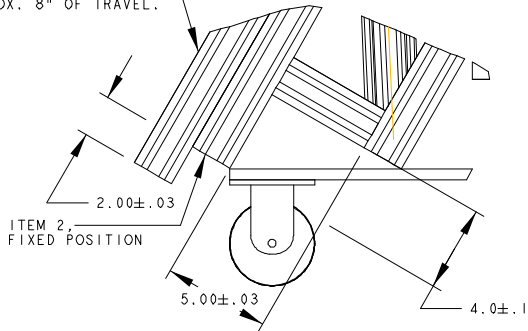
ITEM 3 WILL SLIDE ALONG ITEM 1
 WITH APPROX. 10" OF TRAVEL.



ITEM 1, WILL SLIDE ALONG ITEM 2
WITH APPROX. 8" OF TRAVEL.

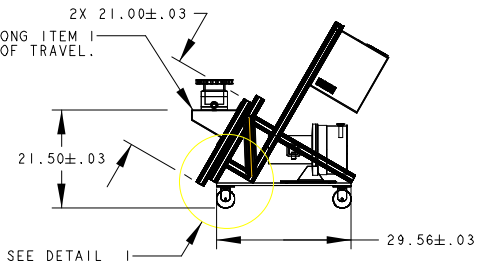
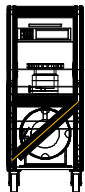


SCALE 3/64

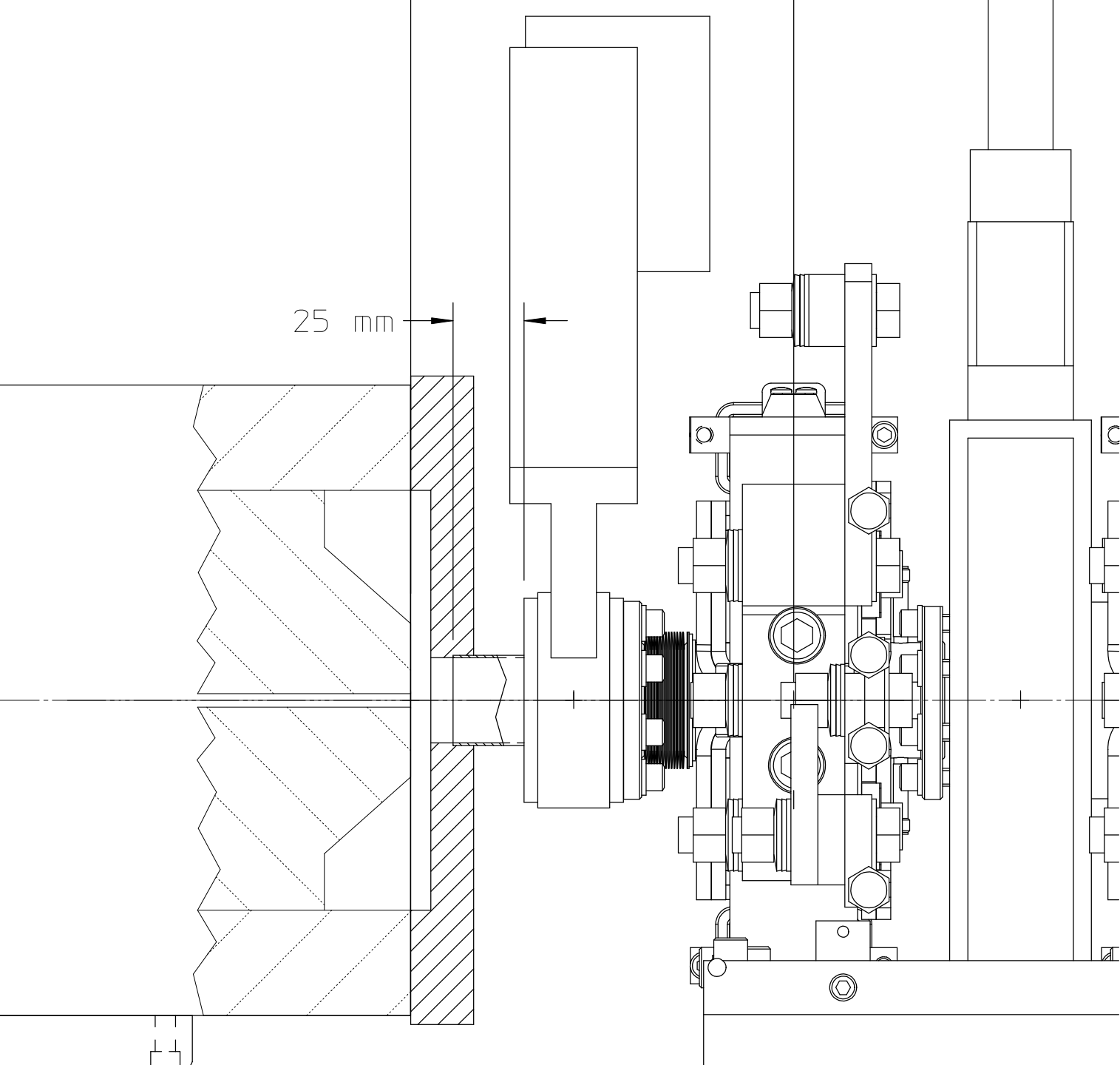


DETAIL I
SCALE 7/32

ITEM 3, WILL SLIDE ALONG ITEM 1
WITH APPROX. 10" OF TRAVEL.

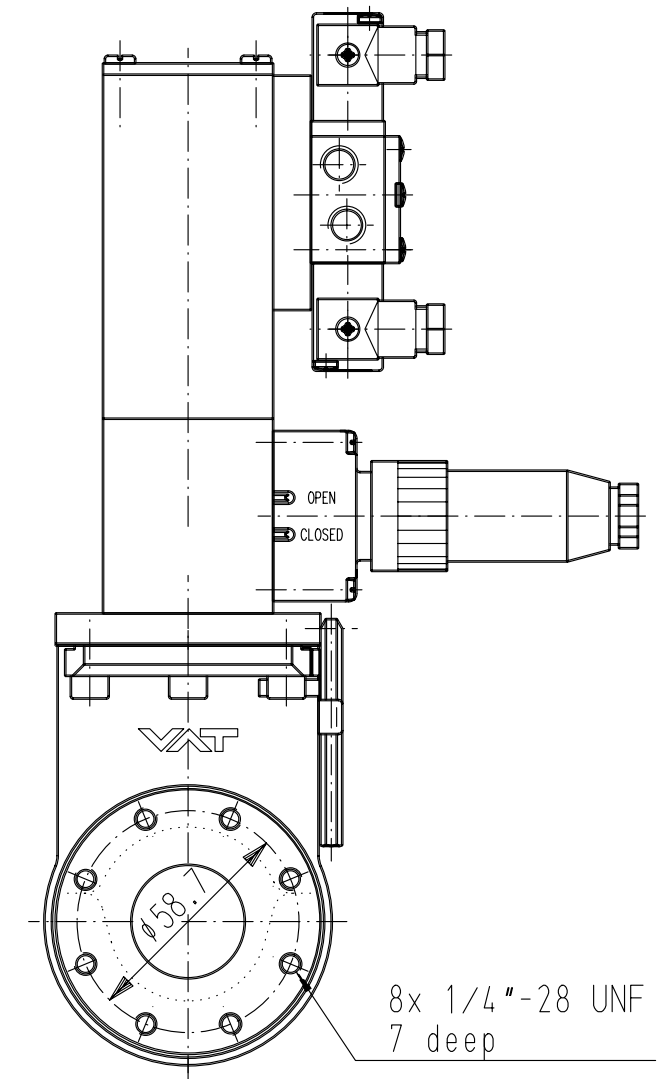
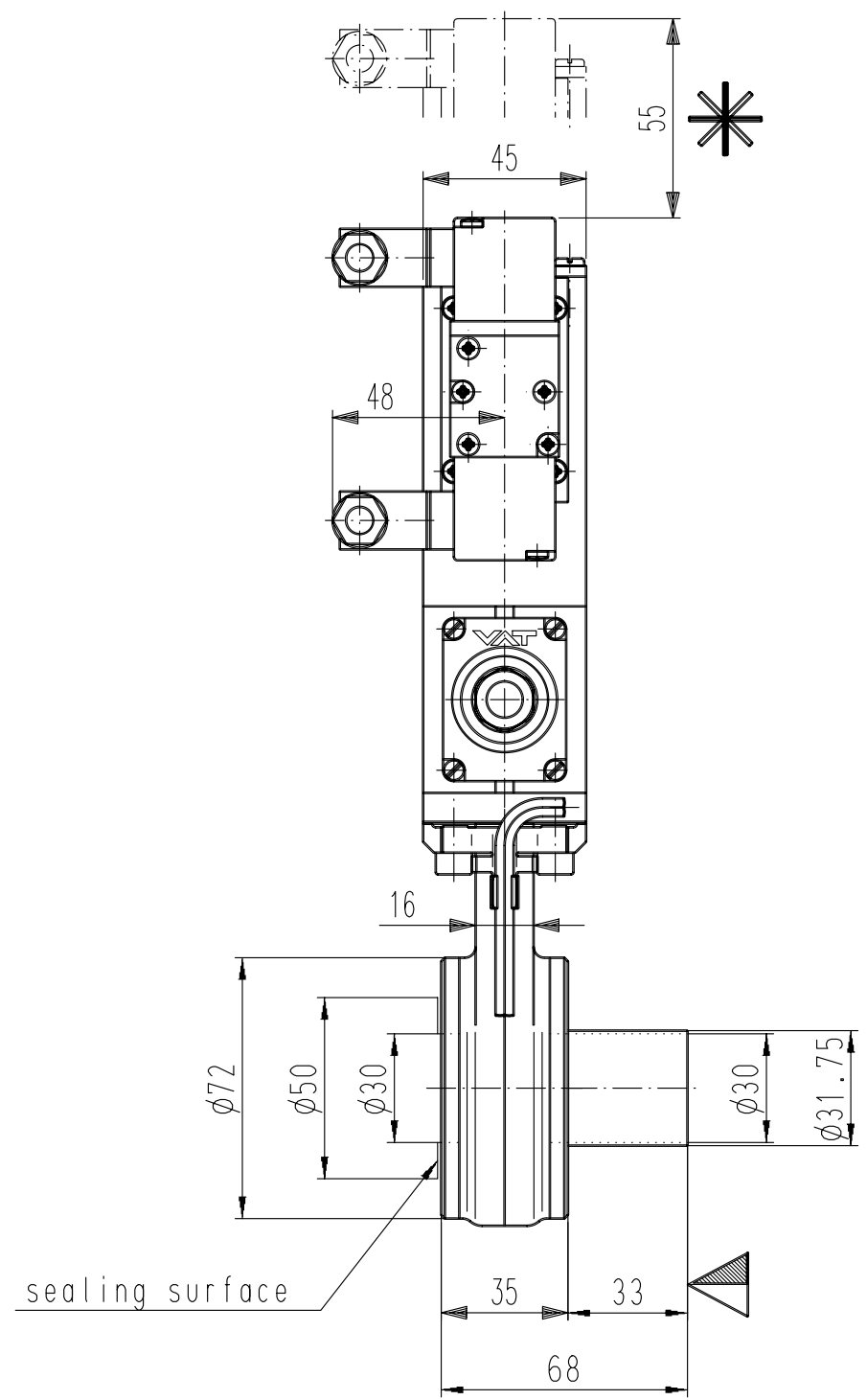
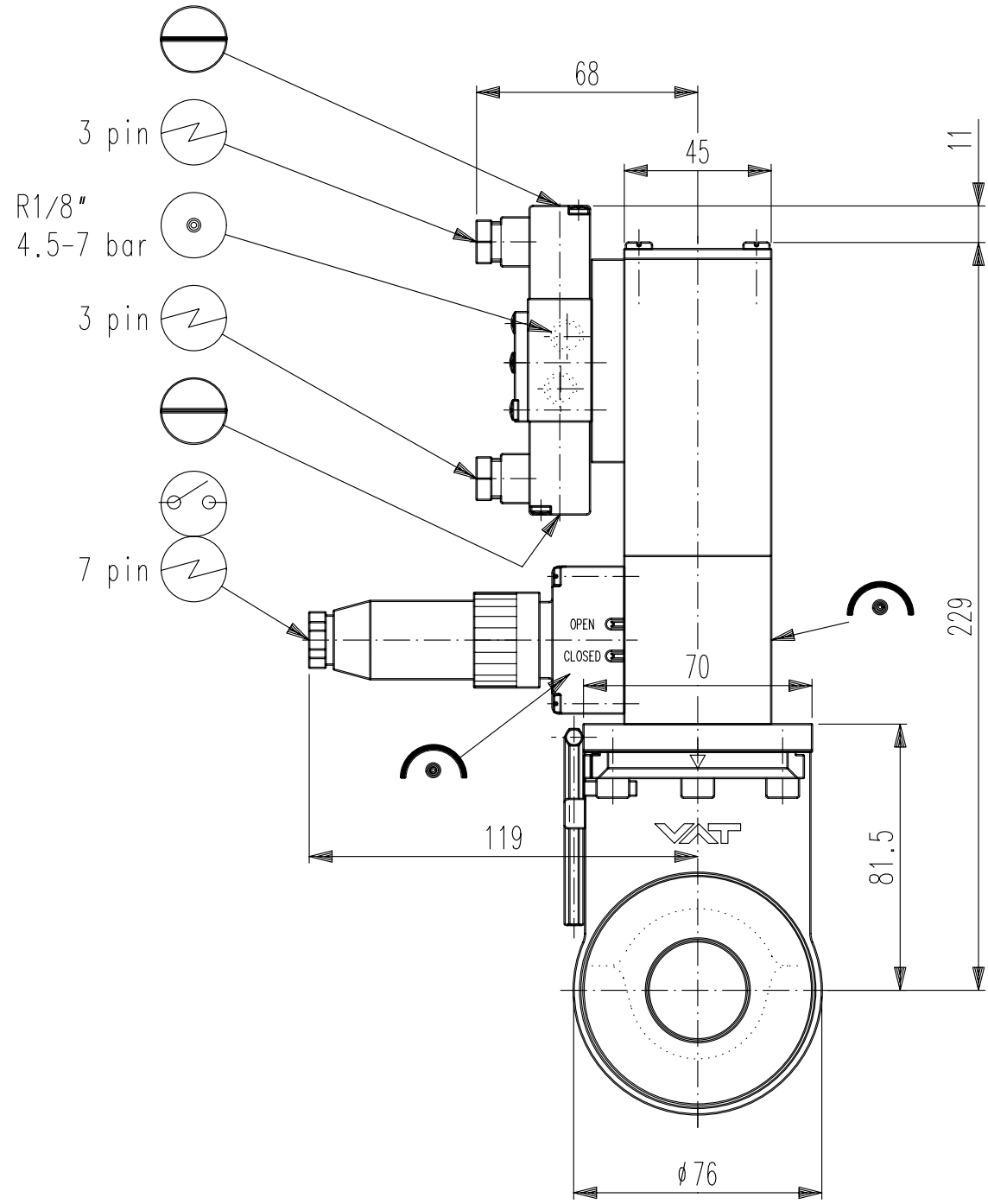


TURBO CART MODIFIED
CART IS IN UPPER POSITION
FOR USE WITH DTL SECTION.



25 mm

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not be copied or distributed to a third person



flanges dim. acc. University of California dwg. no. 25B1981 Rev A

Revision			
Code			
Date			
Name			

- ▼ Seat side
- ⊙ Comp. air connection
- ⚡ Electrical connection
- ⊙ Leak detection port
- ⊙ Mech. pos. indication
- ⊙ Position indicator
- ⊙ * Required for dismantling
- ⊙ Emergency actuation
- ⊙ For attachment
- ⊙ Bake-out area

Mini UHV gate valve
Pneumatic actuator double acting
Flanges customer specific
Impulse solenoid

VAT Vakuumentile AG
CH-9469 Haag, Switzerland
Tel ++41 81 7716161 Fax ++41 81 7714830

Date: 25.05.2000
Name: HEIM

Series	01	Ordering No.	01032-XE44-X
Projection E		DN	40
		Flange	special
Dimensional Drawing	213321	Rev.	