

GMW Associates
Electromagnet Excitation Plot
Field Vs Current

Contract No:	Page: 1 of 2	Date: Aug 04, 2004
Customer:		Engr: G.Douglas
Model: 3472	Power Supply:	Set Current:
Serial No: None	Serial No:	Target Field:
Pole Face: 25mm	Position: X=0, Y=0, Z=0	
Serial No: None	Notes: Data taken in Magneto simulation software	
Pole Gap: 10 to 80mm		
Pole Spacers: None		

Gap [mm]									
Amps	05	10	20	30	40	50	60	70	80
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
10	2.00931	1.13224	0.55531	0.35298	0.25081	0.19140	0.15369	0.12856	0.11139
20	2.48779	1.94414	1.11980	0.70712	0.50235	0.38343	0.30778	0.25734	0.22276
30	2.71927	2.21963	1.57004	1.05905	0.75248	0.57424	0.46091	0.38571	0.32978
40	2.84903	2.37483	1.75395	1.30702	0.97101	0.75470	0.60736	0.51506	0.43262
50	2.92694	2.46694	1.84715	1.43196	1.11697	0.88857	0.72827	0.63768	0.54772
60	2.98427	2.53201	1.92095	1.50598	1.20482	0.98042	0.81393	0.73019	0.63340
70	3.03197	2.58608	1.97077	1.56285	1.26505	1.04747	0.89082	0.79405	0.69395
80	3.07120	2.63054	2.01952	1.61199	1.31550	1.10019	0.94654	0.85660	0.75083
90	3.10450	2.66556	2.05791	1.65283	1.36126	1.14846	1.00870	0.90467	0.80093
100	3.13030	2.69997	2.09547	1.69015	1.39952	1.18767	1.04875	0.94136	0.84100

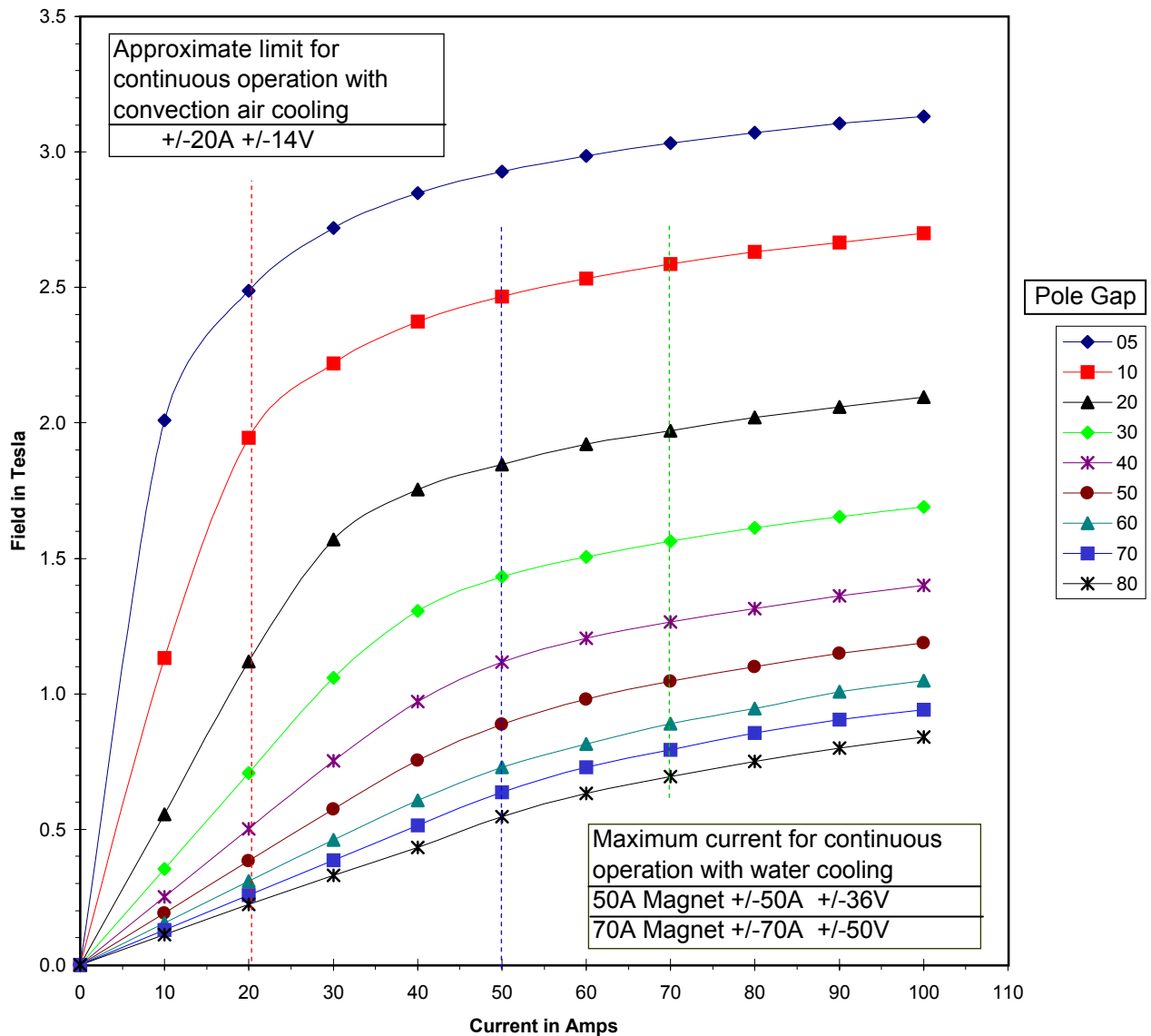
Gap [mm]									
Amps									
0	0.00000	0.00000	0.00000	0.00000	0.00000				
10	0.00000	0.00000	0.00000	0.00000	0.00000				
20	0.00000	0.00000	0.00000	0.00000	0.00000				
30	0.00000	0.00000	0.00000	0.00000	0.00000				
40	0.00000	0.00000	0.00000	0.00000	0.00000				
50	0.00000	0.00000	0.00000	0.00000	0.00000				
60	0.00000	0.00000	0.00000	0.00000	0.00000				
70	0.00000	0.00000	0.00000	0.00000	0.00000				
80	0.00000	0.00000	0.00000	0.00000	0.00000				
90	0.00000	0.00000	0.00000	0.00000	0.00000				
100	0.00000	0.00000	0.00000	0.00000	0.00000				

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Electromagnet Excitation Plot

Field Vs Current

Contract No:	Page: 2 of 2	Date: Aug 04, 2004
Customer:		Engr: G.Douglas
Model: 3472	Power Supply:	Set Current:
Serial No: None	Serial No:	Target Field:
Pole Face: 25mm	Position: X=0, Y=0, Z=0	
Serial No: None	Notes: Data taken in Magneto simulation software	
Pole Gap: 10 to 80mm		
Pole Spacers: None		



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Field Vs Current

Contract No:		Page: 1 of 2	Date: Aug 04, 2004
Customer:			Engr: G.Douglas
Model:	3472	Power Supply:	Set Current:
Serial No:	None	Serial No:	Target Field:
Pole Face:	50mm	Position:	X=0, Y=0, Z=0
Serial No:	None	Notes:	Data taken in Magneto simulation software
Pole Gap:	10 to 80mm		
Pole Spacers:	None		

Gap [mm]									
Amps	05	10	20	30	40	50	60	70	80
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
10	1.99531	1.12700	0.56535	0.37587	0.27805	0.21736	0.17623	0.14700	0.12568
20	2.34001	1.97513	1.12814	0.75210	0.55697	0.43536	0.35300	0.29447	0.25165
30	2.43159	2.17794	1.55600	1.09254	0.82703	0.64990	0.52804	0.44118	0.37738
40	2.48221	2.23430	1.75084	1.31555	1.03216	0.83539	0.68888	0.58035	0.49900
50	2.51853	2.26925	1.84777	1.45280	1.16398	0.96066	0.80699	0.69206	0.60457
60	2.54879	2.29934	1.90796	1.54840	1.26016	1.05072	0.89335	0.77275	0.68366
70	2.57669	2.32566	1.95229	1.62436	1.34258	1.12578	0.96341	0.83853	0.75081
80	2.60308	2.35228	1.98374	1.67813	1.41055	1.19300	1.02502	0.89648	0.80747
90	2.62900	2.37863	2.01580	1.71987	1.46691	1.25016	1.08051	0.94936	0.85990
100	2.65604	2.40314	2.04100	1.75346	1.51255	1.30192	1.12956	0.99593	0.90402

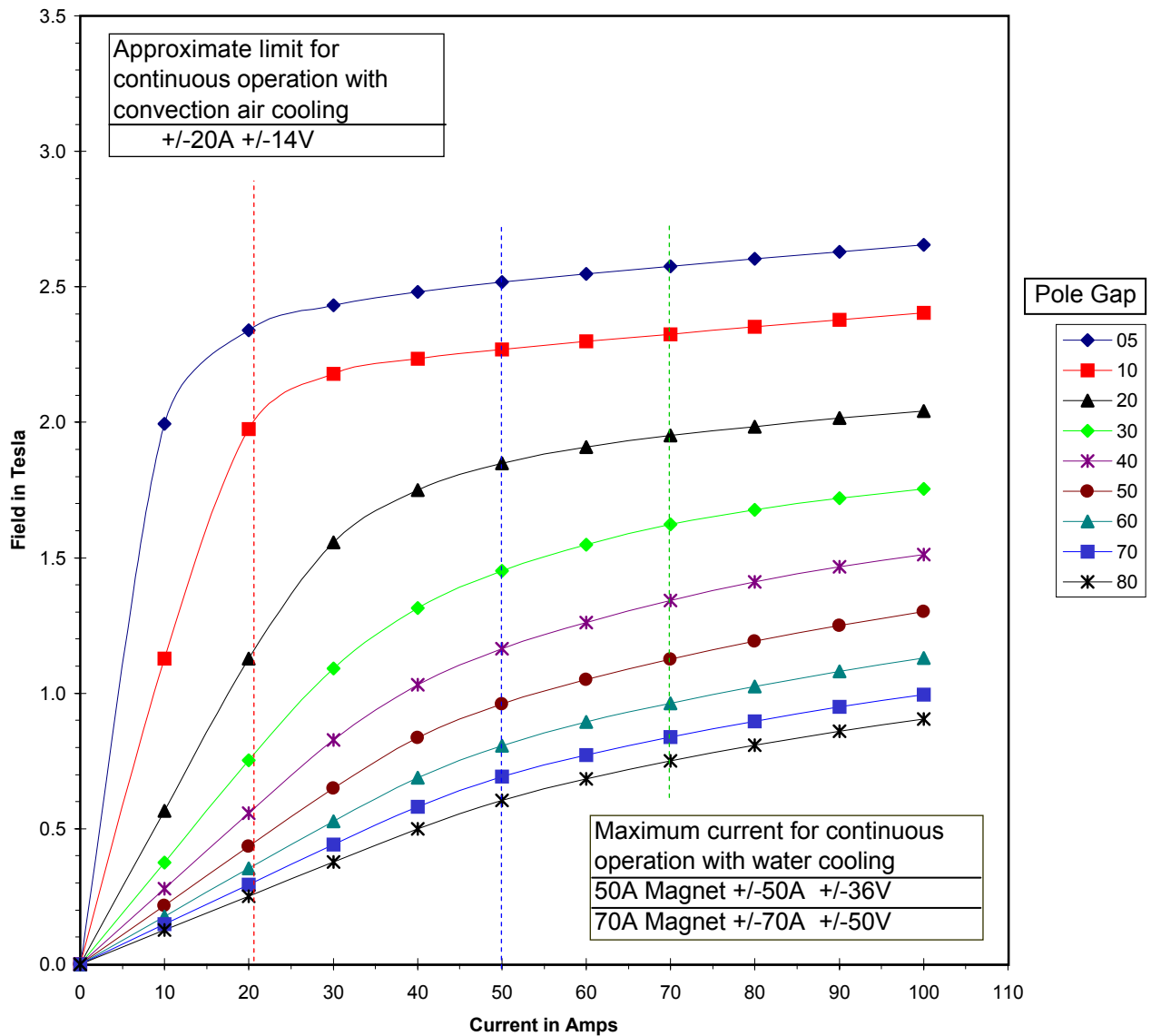
Gap [mm]									
Amps									
0	0.00000	0.00000	0.00000	0.00000	0.00000				
10	0.00000	0.00000	0.00000	0.00000	0.00000				
20	0.00000	0.00000	0.00000	0.00000	0.00000				
30	0.00000	0.00000	0.00000	0.00000	0.00000				
40	0.00000	0.00000	0.00000	0.00000	0.00000				
50	0.00000	0.00000	0.00000	0.00000	0.00000				
60	0.00000	0.00000	0.00000	0.00000	0.00000				
70	0.00000	0.00000	0.00000	0.00000	0.00000				
80	0.00000	0.00000	0.00000	0.00000	0.00000				
90	0.00000	0.00000	0.00000	0.00000	0.00000				
100	0.00000	0.00000	0.00000	0.00000	0.00000				

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Field Vs Current

Contract No:	Page: 2 of 2	Date: Aug 04, 2004
Customer:		Engr: G.Douglas
Model: 3472	Power Supply:	Set Current:
Serial No: None	Serial No:	Target Field:
Pole Face: 50mm	Position: X=0, Y=0, Z=0	
Serial No: None	Notes: Data taken in Magneto simulation software	
Pole Gap: 10 to 80mm		
Pole Spacers: None		



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Contract No:	Page: 1 of 2	Date: Aug 04, 2004
Customer:		Engr: G.Douglas
Model: 3472	Power Supply:	Set Current:
Serial No: None	Serial No:	Target Field:
Pole Face: 75mm	Position: X=0, Y=0, Z=0	
Serial No: None	Notes: Data taken in Magneto simulation software	
Pole Gap: 10 to 80mm		
Pole Spacers: None		

Gap [mm]									
Amps	05	10	20	30	40	50	60	70	80
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
10	1.89883	1.11069	0.56352	0.37703	0.28273	0.22470	0.18502	0.15606	0.13396
20	2.15789	1.75418	1.09232	0.75102	0.56560	0.45001	0.37058	0.31257	0.26843
30	2.20323	1.91521	1.36875	1.03644	0.81792	0.66600	0.55327	0.46807	0.40234
40	2.22601	1.99161	1.50081	1.18497	0.97735	0.82448	0.70393	0.60721	0.52748
50	2.24260	2.03942	1.58367	1.27973	1.07568	0.92381	0.80434	0.70734	0.62545
60	2.25549	2.07674	1.64712	1.35207	1.15067	0.99932	0.87760	0.77813	0.69541
70	2.26942	2.10292	1.69869	1.41176	1.21188	1.06236	0.93957	0.83796	0.75167
80	2.27787	2.12662	1.74189	1.45942	1.26353	1.11783	0.99386	0.89049	0.80215
90	2.29023	2.14792	1.77814	1.50174	1.30649	1.16490	1.04126	0.93762	0.84814
100	2.30208	2.16594	1.81188	1.54157	1.34828	1.20564	1.08547	0.97997	0.88876

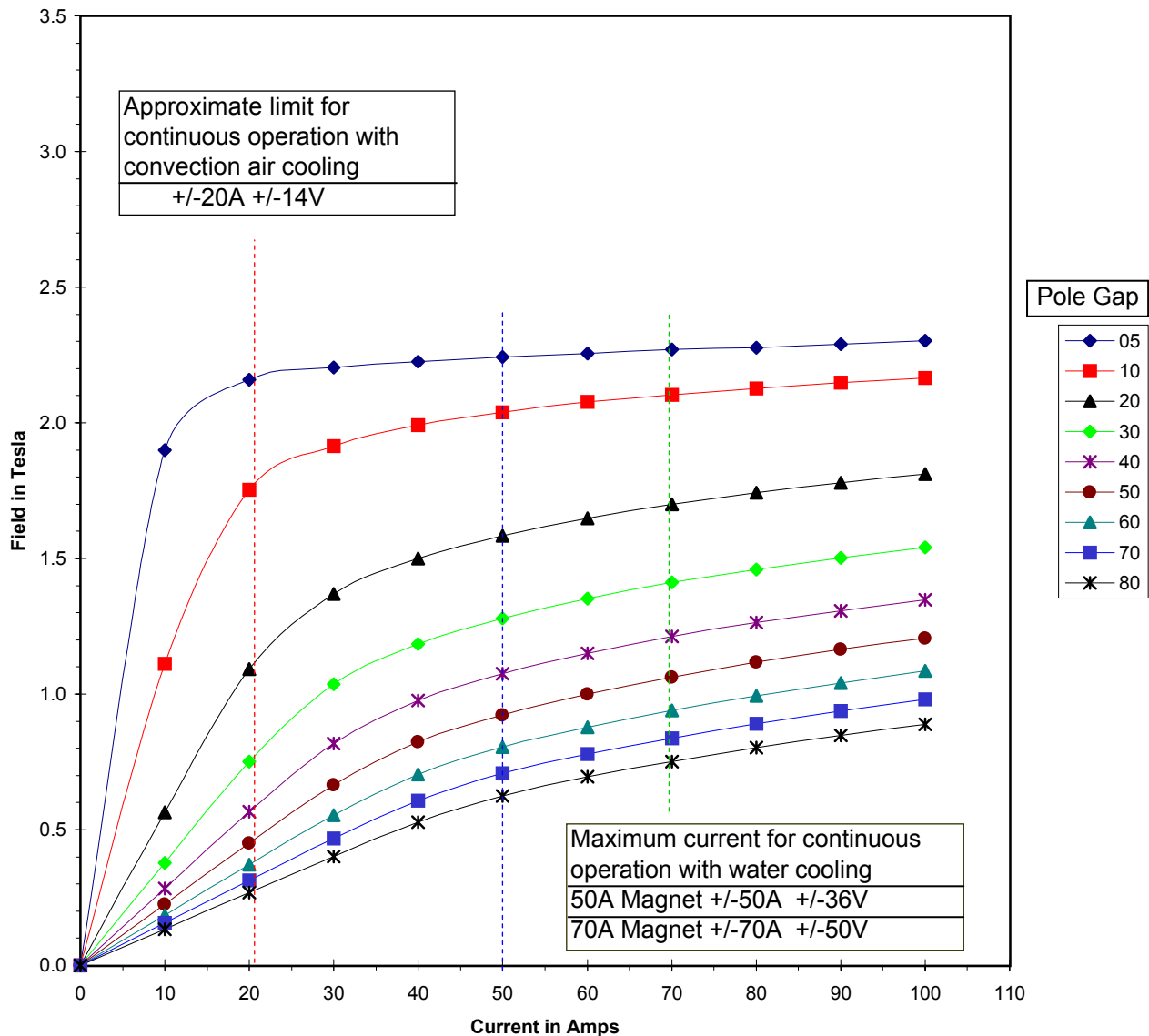
Gap [mm]									
Amps									
0	0.00000	0.00000	0.00000	0.00000	0.00000				
10	0.00000	0.00000	0.00000	0.00000	0.00000				
20	0.00000	0.00000	0.00000	0.00000	0.00000				
30	0.00000	0.00000	0.00000	0.00000	0.00000				
40	0.00000	0.00000	0.00000	0.00000	0.00000				
50	0.00000	0.00000	0.00000	0.00000	0.00000				
60	0.00000	0.00000	0.00000	0.00000	0.00000				
70	0.00000	0.00000	0.00000	0.00000	0.00000				
80	0.00000	0.00000	0.00000	0.00000	0.00000				
90	0.00000	0.00000	0.00000	0.00000	0.00000				
100	0.00000	0.00000	0.00000	0.00000	0.00000				

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Contract No:	Page: 2 of 2	Date: Aug 04, 2004
Customer:		Engr: G.Douglas
Model: 3472	Power Supply:	Set Current:
Serial No: None	Serial No:	Target Field:
Pole Face: 75mm	Position: X=0, Y=0, Z=0	
Serial No: None	Notes: Data taken in Magneto simulation software	
Pole Gap: 10 to 80mm		
Pole Spacers: None		



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Contract No:	Page: 1 of 2	Date: Aug 04, 2004
Customer:		Engr: G.Douglas
Model: 3472	Power Supply:	Set Current:
Serial No: None	Serial No:	Target Field:
Pole Face: 100mm	Position: X=0, Y=0, Z=0	
Serial No: None	Notes: Data taken in Magneto simulation software	
Pole Gap: 10 to 80mm		
Pole Spacers: None		

Gap [mm]									
Amps	05	10	20	30	40	50	60	70	80
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
10	1.53017	1.06389	0.53913	0.37634	0.28291	0.22643	0.18768	0.15942	0.13776
20	1.74996	1.42918	0.98853	0.73744	0.56484	0.45318	0.37572	0.31915	0.27595
30	1.82634	1.55744	1.19039	0.95557	0.78088	0.65365	0.55356	0.47482	0.41237
40	1.89773	1.62711	1.28608	1.07301	0.90942	0.78511	0.68414	0.59945	0.53106
50	1.94378	1.68400	1.35227	1.14546	0.99176	0.87021	0.77257	0.69076	0.62047
60	1.99012	1.72703	1.40424	1.19938	1.05378	0.93629	0.83895	0.75610	0.68582
70	2.01409	1.76555	1.44993	1.24773	1.10598	0.99158	0.89550	0.81102	0.73931
80	2.04198	1.79830	1.48792	1.28961	1.15006	1.04101	0.94753	0.85942	0.78635
90	2.06909	1.82656	1.52021	1.32464	1.18736	1.08044	0.99049	0.90439	0.82924
100	2.09351	1.85632	1.55224	1.35830	1.22226	1.11682	1.02813	0.94409	0.86757

Gap [mm]									
Amps									
0	0.00000	0.00000	0.00000	0.00000	0.00000				
10	0.00000	0.00000	0.00000	0.00000	0.00000				
20	0.00000	0.00000	0.00000	0.00000	0.00000				
30	0.00000	0.00000	0.00000	0.00000	0.00000				
40	0.00000	0.00000	0.00000	0.00000	0.00000				
50	0.00000	0.00000	0.00000	0.00000	0.00000				
60	0.00000	0.00000	0.00000	0.00000	0.00000				
70	0.00000	0.00000	0.00000	0.00000	0.00000				
80	0.00000	0.00000	0.00000	0.00000	0.00000				
90	0.00000	0.00000	0.00000	0.00000	0.00000				
100	0.00000	0.00000	0.00000	0.00000	0.00000				

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Electromagnet Excitation Plot

Field Vs Current

Contract No:	Page: 2 of 2	Date: Aug 04, 2004
Customer:		Engr: G.Douglas
Model: 3472	Power Supply:	Set Current:
Serial No: None	Serial No:	Target Field:
Pole Face: 100mm	Position: X=0, Y=0, Z=0	
Serial No: None	Notes: Data taken in Magneto simulation software	
Pole Gap: 10 to 80mm		
Pole Spacers: None		

