

GMW Associates
Electromagnet Excitation Data
Field Vs Pole Gap

Contract No:	Page: 1 of 2	Date: April 5, 2014
Customer: GMW	Fixed Axis:	Engr: Greg Douglas
Model: 5414	Power Supply:	Set Currents: 140A
Serial No: None	Serial No:	Target Field:
Pole Face: All	Teslameter:	Probe:
Serial No: None	Serial No:	Serial No:
Pole Gap: See table below	Notes: Data taken in Magneto simulation software	
Pole Spacers: none		

Face	02 Pole Gap	04 Pole Gap	06 Pole Gap	08 Pole Gap	10 Pole Gap	12 Pole Gap	14 Pole Gap
25mm	4.35083	4.21557	4.08567	3.95253	3.82262	3.70101	3.58127
Face	05 Pole Gap	10 Pole Gap	15 Pole Gap	20 Pole Gap	25 Pole Gap	30 Pole Gap	35 Pole Gap
50mm	3.72798	3.54300	3.35674	3.18046	3.02132	2.86550	2.72153
Face	10 Pole Gap	20 Pole Gap	30 Pole Gap	40 Pole Gap	50 Pole Gap	60 Pole Gap	70 Pole Gap
75mm	3.31270	3.04441	2.79234	2.56160	2.36584	2.18100	2.01435
Face	10 Pole Gap	20 Pole Gap	30 Pole Gap	40 Pole Gap	50 Pole Gap	60 Pole Gap	70 Pole Gap
100mm	3.11725	2.90357	2.69934	2.50780	2.32346	2.16010	2.00596
Face	20 Pole Gap	40 Pole Gap	60 Pole Gap	80 Pole Gap	100 Pole Gap	120 Pole Gap	140 Pole Gap
150mm	2.66260	2.33790	2.02869	1.75087	1.53822	1.36973	1.22186
Face	20 Pole Gap	40 Pole Gap	60 Pole Gap	80 Pole Gap	100 Pole Gap	120 Pole Gap	140 Pole Gap
200mm	2.43200	2.13975	1.82570	1.59311	1.42508	1.29360	1.18150
Face	20 Pole Gap	40 Pole Gap	60 Pole Gap	80 Pole Gap	100 Pole Gap	120 Pole Gap	140 Pole Gap
250mm	2.24046	1.90751	1.64571	1.46379	1.32746	1.22170	1.13121
Face	20 Pole Gap	40 Pole Gap	60 Pole Gap	80 Pole Gap	100 Pole Gap	120 Pole Gap	140 Pole Gap
300mm	2.05024	1.74647	1.53573	1.38175	1.26590	1.17127	1.09242
Face	16 Pole Gap	18 Pole Gap	20 Pole Gap				
25mm	3.46959	3.36257	3.25847	0.00000	0.00000	0.00000	0.00000
Face	40 Pole Gap	45 Pole Gap	50 Pole Gap				
50mm	2.58937	2.46580	2.35096	0.00000	0.00000	0.00000	0.00000
Face							
75mm	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Face	80 Pole Gap	90 Pole Gap	100 Pole Gap				
100mm	1.86732	1.73333	1.60983	0.00000	0.00000	0.00000	0.00000
Face	20 Pole Gap	40 Pole Gap	60 Pole Gap	80 Pole Gap	100 Pole Gap	120 Pole Gap	140 Pole Gap
150mm	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Face	160 Pole Gap	180 Pole Gap	200 Pole Gap				
200mm	1.07947	0.98419	0.89621	0.00000	0.00000	0.00000	0.00000
Face	160 Pole Gap	180 Pole Gap	200 Pole Gap				
250mm	1.04972	0.97189	0.89326	0.00000	0.00000	0.00000	0.00000

GMW Associates

Electromagnet Excitation Plot

Field Vs Pole Gap

Contract No:
 Customer: GMW
 Model: 5414
 Serial No: None
 Pole Face: All
 Serial No: None
 Pole Gap:
 Pole Spacers: none

Page: 2 of 2

Fixed Axis:
 Power Supply:
 Serial No:
 Teslameter:
 Serial No:
 Notes: Data taken in Magneto simulation software

Date: April 5, 2014
 Engr: Greg Douglas
 Set Currents: 140A
 Target Field:
 Probe:
 Serial No:

