

GMW Associates
Electromagnet Uniformity Plot
Field vs Radial Position

Contract #:		Date: 24th June 2020	
Customer: GMW	Power Supply: None	Engr: Tom King	
Model: 3474	Serial #: None	Current: 140A	
Serial #: None		Probe: None	
Pole Gap: 10 to 160mm	Notes: Modelled in FEMM 4.2	Serial #: None	
Pole Spacers: None			

Position [mm]	Gap=10mm Field [T]	Gap=20mm Field [T]	Gap=30mm Field [T]	Gap=40mm Field [T]	Gap=50mm Field [T]	Gap=60mm Field [T]	Gap=70mm Field [T]
0	3.581487	2.990021	2.515288	2.137994	1.838588	1.596920	1.416750
5	3.578010	2.954103	2.491443	2.121319	1.826827	1.588813	1.409609
10	3.509854	2.875558	2.424287	2.073975	1.793650	1.565323	1.392922
15	3.210567	2.702645	2.318313	1.999218	1.744608	1.527335	1.367515
20	2.860681	2.472204	2.181866	1.906147	1.676542	1.478634	1.329871
25	2.556945	2.306160	2.046722	1.811152	1.600057	1.423977	1.295145
30	2.356446	2.133196	1.910579	1.709634	1.524743	1.367469	1.246212
35	2.176167	1.993521	1.800124	1.618734	1.456188	1.308730	1.201573
40	2.026451	1.854311	1.686451	1.526626	1.377993	1.256007	1.160654
45	1.890535	1.738462	1.588149	1.445015	1.313099	1.194647	1.116139
50	1.770254	1.630152	1.499545	1.368754	1.248792	1.144949	1.073626
55	1.660276	1.542771	1.412460	1.295682	1.189398	1.096766	1.033174
60	1.560412	1.449795	1.334611	1.226305	1.132939	1.048058	0.996452
65	1.472595	1.364383	1.264433	1.168200	1.082380	1.005321	0.960790
70	1.387206	1.289265	1.196033	1.114053	1.036316	0.967430	0.926791
75	1.299292	1.220107	1.138059	1.061965	0.987081	0.928258	0.895589

Position [mm]	Gap=80mm Field [T]	Gap=90mm Field [T]	Gap=100mm Field [T]	Gap=110mm Field [T]	Gap=120mm Field [T]	Gap=140mm Field [T]	Gap=160mm Field [T]
0	1.251931	1.116260	1.005436	0.913684	0.838506	0.721981	0.637242
5	1.247504	1.112913	1.002852	0.912815	0.837196	0.721364	0.636698
10	1.236291	1.104110	0.996112	0.907274	0.833718	0.719229	0.635595
15	1.215562	1.089359	0.986017	0.900081	0.827290	0.715767	0.633401
20	1.189748	1.067885	0.971714	0.888699	0.820247	0.711289	0.630741
25	1.159945	1.049537	0.954501	0.876309	0.809232	0.705350	0.627509
30	1.126622	1.022739	0.935474	0.861855	0.799420	0.699044	0.623538
35	1.090986	0.995960	0.915167	0.846659	0.787491	0.691828	0.619254
40	1.059257	0.968913	0.894890	0.828866	0.774089	0.683671	0.614594
45	1.022682	0.943381	0.874066	0.813056	0.760968	0.676165	0.609571
50	0.989022	0.915547	0.851721	0.796005	0.747321	0.667460	0.604624
55	0.955874	0.890397	0.831252	0.780564	0.735040	0.659484	0.599566
60	0.926547	0.865379	0.811082	0.763820	0.722403	0.651471	0.594837
65	0.897334	0.842261	0.792509	0.748377	0.708753	0.643092	0.589556
70	0.870463	0.820532	0.774134	0.733293	0.697537	0.636228	0.584843
75	0.844450	0.797606	0.756599	0.720072	0.685720	0.627767	0.580036