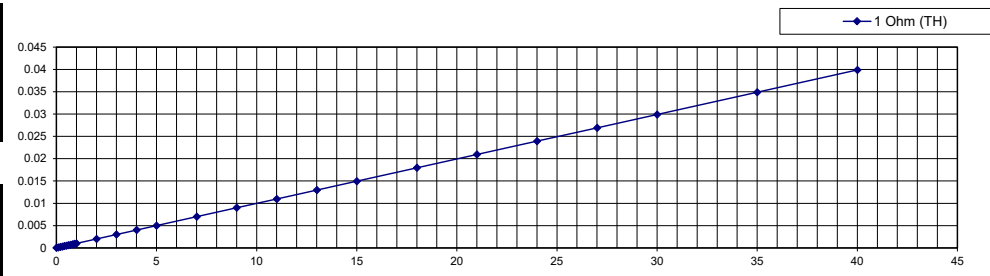




# CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>TURNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG



### TEST SETUP

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	1
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60

Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error		Equivalent Turns Ratio	% Absolute Error	
						Affected by Core and DCR	Affected by turns ratio			
0A	0.000583449	0.000583449	2.07014E-05	0.000801725	-0.000582981	103.5509656	28.18395011	97.18160499		
0.1A	0.100528058	0.100528058	0.00010083	0.001116705	-0.000471188	121.3989942	997.0096175	0.299038247		
0.2A	0.200238932	0.200238932	0.000212177	0.001001666	-0.000382876	155.4166724	943.7343779	5.626562211		
0.3A	0.300014981	0.300014981	0.000312119	0.000912051	-0.00030982	200.7422972	961.2184726	3.878152739		
0.4A	0.400257395	0.400257395	0.000403546	0.001022411	-0.000174221	331.6285429	991.8516426	0.814835737		
0.5A	0.500349377	0.500349377	0.000505881	0.001004134	-8.10308E-05	724.3070168	989.0658149	1.093418512		
0.6A	0.600225691	0.600225691	0.00060617	0.001045389	4.40206E-05	-1277.014954	990.1937043	0.98062957		
0.7A	0.700118618	0.700118618	0.000710597	0.001013304	0.000125984	-464.0359002	985.2542365	1.474576349		
0.8A	0.800408598	0.800408598	0.000812221	0.000952745	0.000179137	-353.4081054	985.4564953	1.454350474		
0.9A	0.900645573	0.900645573	0.000907721	0.001037333	0.00035082	-158.7424208	992.2048046	0.779519542		
1A	1.00053566	1.00053566	0.001011341	0.000995863	0.000412948	-144.9073913	989.3161324	1.068386757		
2A	2.00081668	2.00081668	0.002007484	0.000998044	0.001413454	-42.02687254	996.6788177	0.33211823		
3A	3.00032948	3.00032948	0.003005041	0.000996652	0.002406835	-24.85447476	998.4320648	0.156793525		
4A	4.00170464	0.040017046	0.004003063	0.001007027	0.003446376	-16.15284732	999.66055	0.033945003		
5A	5.00009632	0.050000963	0.005008471	0.000997477	0.004404034	-13.72462633	998.3279427	0.167205728		
7A	7.00541936	0.035027097	0.007008735	0.000998666	0.006412629	-9.295813837	999.5269517	0.047304829		
9A	9.00343068	0.045017153	0.009004082	0.000981562	0.008253977	-9.087791952	999.9276939	0.00723061		
11A	11.00134975	0.0220027	0.010965163	0.000996988	0.010384762	-5.588970104	1003.300129	-0.330012869		
13A	13.0060626	0.026012125	0.012963837	0.000999976	0.012422301	-4.359386448	1003.257153	-0.325715286		
15A	15.0023083	0.030004617	0.014960035	0.000996592	0.014367728	-4.122479248	1002.825742	-0.282574203		
18A	18.00315205	0.036006304	0.017950651	0.000997661	0.017377585	-3.297731663	1002.924727	-0.292472675		
21A	21.00149085	0.042002982	0.020941976	0.000997592	0.020367476	-2.820673265	1002.841917	-0.28419167		
24A	24.00410665	0.048008213	0.023937362	0.000988855	0.023153126	-3.387171277	1002.788317	-0.278831689		
27A	27.0068094	0.027006809	0.026906599	0.000999791	0.026417716	-1.85058575	1003.724399	-0.372439868		
30A	30.0023021	0.030002302	0.029901465	0.000998361	0.02936967	-1.810694592	1003.37231	-0.337230967		
35A	35.0013802	0.03500138	0.034892348	0.000999914	0.034414912	-1.387293006	1003.124814	-0.312481406		
40A	40.0037515	0.040003752	0.039894288	0.000997264	0.039310839	-1.484192646	1002.743841	-0.274384143		

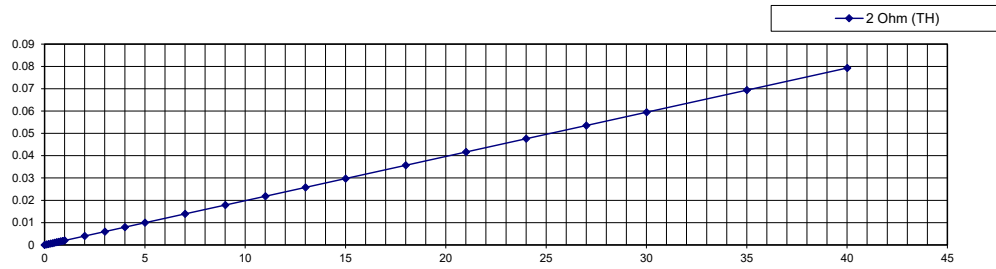
**CURRENT TRANSFORMER CHARACTERISTICS TEST**

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>TURNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

**TEST SETUP**

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	2
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error Affected by Core and DCR	Equivalent Turns Ratio	% Absolute Error Affected by turns ratio
0A	0.000481198	0.000481198	2.09787E-05	0.001863329	-0.000480301	104.3678309	45.87479836	95.41252016
0.1A	0.100087246	0.100087246	0.000206578	0.001994015	-0.000281622	173.3526633	969.0040909	3.099590913
0.2A	0.200068007	0.200068007	0.000405941	0.001969486	-8.71668E-05	565.7057398	985.7006577	1.429934228
0.3A	0.300096959	0.300096959	0.000602946	0.00195897	0.000106683	-465.1747311	995.4350894	0.456491057
0.4A	0.400049012	0.400049012	0.000798749	0.001988325	0.000314229	-154.1931193	1001.688378	-0.168837804
0.5A	0.500084739	0.500084739	0.000997653	0.001962835	0.000500386	-99.37666115	1002.522472	-0.252247243
0.6A	0.600079102	0.600079102	0.001193925	0.002079801	0.000766847	-55.69270724	1005.220447	-0.522044686
0.7A	0.700035525	0.700035525	0.001401815	0.001986057	0.000909112	-54.19598681	998.7560269	0.124397311
0.8A	0.800030373	0.800030373	0.00160041	0.001938805	0.001069905	-49.58434793	999.7815723	0.021842773
0.9A	0.900074501	0.900074501	0.001794376	0.00193658	0.001261869	-42.19992098	1003.217069	-0.321706867
1A	1.00006647	1.00006647	0.001988019	0.001994562	0.001513496	-31.35273221	1006.093544	-0.60935438
2A	2.00023	2.00023	0.003982907	0.001983131	0.003485521	-14.27006488	1004.407146	-0.440714561
3A	3.00076455	3.00076455	0.005967098	0.001990858	0.005492898	-8.632958269	1005.770146	-0.577014649
4A	4.00447374	0.040044737	0.007965341	0.001980694	0.007450441	-6.910998085	1005.474576	-0.547457567
5A	5.00383863	0.050038386	0.009944777	0.001984778	0.009450311	-5.232273358	1006.324948	-0.632494822
7A	7.00341522	0.035017076	0.013913493	0.001976281	0.013359517	-4.146676254	1006.708433	-0.670843346
9A	9.0057072	0.045028536	0.017870584	0.001971668	0.017275066	-3.447266087	1007.880582	-0.788058194
11A	11.00224785	0.022004496	0.021807099	0.001985705	0.021366024	-2.064375045	1009.051947	-0.90519468
13A	13.0009978	0.026001996	0.025776027	0.001983133	0.025301514	-1.875433662	1008.766603	-0.876660303
15A	15.0018741	0.030003748	0.029744032	0.001981751	0.029248783	-1.693228904	1008.731711	-0.873171132
18A	18.0007503	0.036001501	0.035687058	0.001984128	0.035234591	-1.284155934	1008.811105	-0.881110453
21A	21.00548735	0.042010975	0.041648841	0.001983358	0.041184862	-1.126574909	1008.694941	-0.869494074
24A	24.00167835	0.048003357	0.047592024	0.00197711	0.046972769	-1.318329022	1008.642883	-0.864288303
27A	27.0018115	0.027001812	0.053523619	0.001982971	0.053062617	-0.868787928	1008.968084	-0.896808384
30A	30.0098596	0.03000986	0.059488492	0.001978665	0.058898273	-1.002098885	1008.929924	-0.892992387
35A	35.0011572	0.035001157	0.069364599	0.00198383	0.068955153	-0.593786597	1009.193668	-0.919366804
40A	40.0091983	0.040009198	0.079299702	0.001982037	0.078818504	-0.610513879	1009.063015	-0.906301512

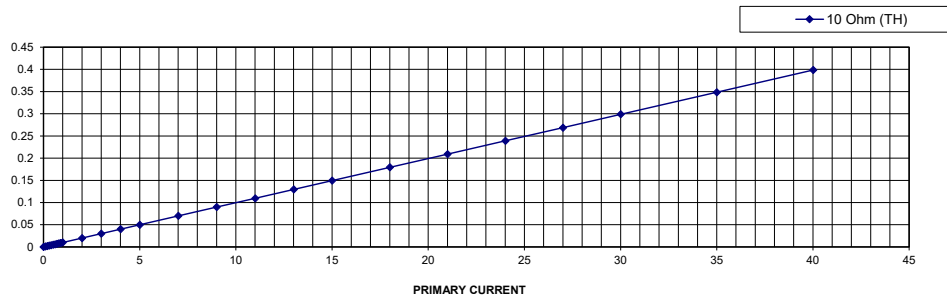
**CURRENT TRANSFORMER CHARACTERISTICS TEST**

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>URNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

**TEST SETUP**

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	10
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error		Equivalent Turns Ratio	% Absolute Error	
						Affected by Core and DCR			Affected by turns ratio	
0A	0.000518243	0.000518243	1.85773E-05	0.009808417	-0.00051316		103.6201716	278.9662143		72.10337857
0.1A	0.100043362	0.100043362	0.000994761	0.009938349	0.000476023		-108.9734018	1005.702364		-0.570236394
0.2A	0.200234292	0.200234292	0.001990494	0.010059965	0.001496107		-33.04485972	1005.953001		-0.595300107
0.3A	0.300025482	0.300025482	0.002994389	0.009896665	0.002451009		-22.16967409	1001.958803		-0.195880335
0.4A	0.400213465	0.400213465	0.003985916	0.010043828	0.003501432		-13.83674057	1004.068911		-0.406891132
0.5A	0.500217766	0.500217766	0.004990342	0.009880634	0.004424226		-12.79583528	1002.371653		-0.237165294
0.6A	0.600158467	0.600158467	0.00597782	0.010061775	0.005520417		-8.285661907	1003.975511		-0.397551129
0.7A	0.700184287	0.700184287	0.006984257	0.009984563	0.006472791		-7.901784724	1002.517914		-0.251791418
0.8A	0.800002176	0.800002176	0.007980895	0.009888932	0.007392924		-7.953157173	1002.396556		-0.239655574
0.9A	0.900499769	0.900499769	0.008974709	0.010058829	0.00853973		-5.09358782	1003.374897		-0.337489718
1A	1.00205074	1.00205074	0.009996193	0.009983696	0.009485927		-5.37918243	1002.432383		-0.243238305
2A	2.00097758	2.00097758	0.019969175	0.009972257	0.01943602		-2.743131425	1002.033164		-0.203316359
3A	3.00114902	3.00114902	0.029943142	0.009993417	0.02947349		-1.593471436	1002.282606		-0.228260616
4A	4.00285394	0.040028539	0.039953597	0.009992557	0.039480504		-1.198294048	1001.875746		-0.187574602
5A	5.00167377	0.050016738	0.049934361	0.009986079	0.049428865		-1.022672703	1001.649702		-0.16497012
7A	7.00362594	0.03501813	0.069926013	0.009970854	0.069313889		-0.883118299	1001.576615		-0.157661499
9A	9.0057041	0.045028521	0.089888442	0.009833847	0.088042469		-2.096685114	1001.875645		-0.187564492
11A	11.001029	0.022002058	0.109510161	0.009974793	0.109214743		-0.27049252	1004.566964		-0.456696434
13A	13.0044745	0.026008949	0.129494115	0.009952358	0.128906946		-0.455498613	1004.252162		-0.425216235
15A	15.00138745	0.030002775	0.149368108	0.009958071	0.148866644		-0.336854383	1004.323322		-0.432332249
18A	18.0008547	0.036001709	0.179237017	0.009931875	0.178263998		-0.545830127	1004.304524		-0.430452377
21A	21.0032243	0.042006449	0.209056177	0.010000793	0.209530654		0.226447647	1004.668917		-0.466891729
24A	24.008515	0.04801703	0.239111467	0.009886562	0.236843422		-0.95761353	1004.072088		-0.407208827
27A	27.0063654	0.027006365	0.2687499	0.009996839	0.269460052		0.263546142	1004.888389		-0.48883888
30A	30.0060013	0.030006001	0.298736778	0.009969513	0.298626982		-0.036766888	1004.429435		-0.442943453
35A	35.0027489	0.035002749	0.348551919	0.009985053	0.348986057		0.124399818	1004.23343		-0.423342957
40A	40.0072702	0.04000727	0.398522329	0.009961248	0.398004086		-0.130210461	1003.890304		-0.389030397

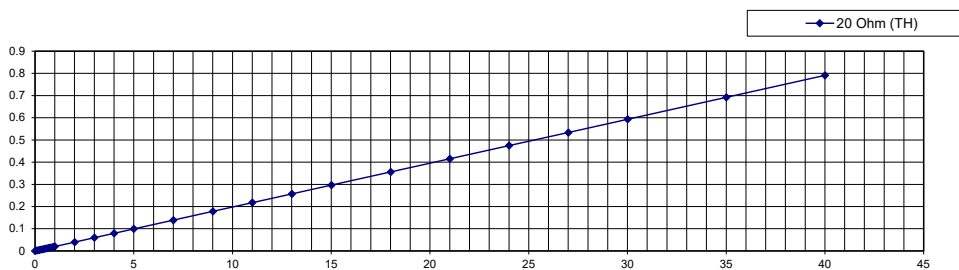
**CURRENT TRANSFORMER CHARACTERISTICS TEST**

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>URNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

**TEST SETUP**

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	20
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error		Equivalent Turns Ratio	% Absolute Error	
						Affected by Core and DCR			Affected by turns ratio	
0A	0.000507717	0.000507717	2.44485E-05	0.019522707	-0.000497805		104.9112601	415.3359427		58.46640573
0.1A	0.100116648	0.100116648	0.001969084	0.01973251	0.001467836		-34.14879624	1016.885274		-1.688527393
0.2A	0.200259751	0.200259751	0.003945159	0.01990034	0.003477521		-13.44747343	1015.217591		-1.521759122
0.3A	0.300430948	0.300430948	0.0059386	0.019768572	0.005431374		-9.33881463	1011.790462		-1.179046216
0.4A	0.40008319	0.40008319	0.007908583	0.019758395	0.007397285		-6.911960444	1011.769639		-1.176963866
0.5A	0.500079816	0.500079816	0.009884356	0.019829388	0.00940856		-5.057049153	1011.861249		-1.186124879
0.6A	0.600413885	0.600413885	0.011873919	0.019785022	0.011371485		-4.418364589	1011.315472		-1.131547246
0.7A	0.700203551	0.700203551	0.013848259	0.019806608	0.01336094		-3.647340298	1011.25135		-1.125135048
0.8A	0.80039052	0.80039052	0.015832623	0.019832666	0.015366161		-3.035643862	1011.064938		-1.106493823
0.9A	0.900144752	0.900144752	0.017811016	0.019932276	0.017434217		-2.161259746	1010.773066		-1.077306551
1A	1.00194283	1.00194283	0.019840083	0.019830578	0.019361388		-2.472419617	1010.018779		-1.001877855
2A	2.0010354	2.0010354	0.039652666	0.019816686	0.039146175		-1.293846678	1009.281646		-0.928164578
3A	3.00136105	3.00136105	0.059475806	0.019836726	0.059029459		-0.756142875	1009.271252		-0.927125228
4A	4.00259118	0.040025912	0.079336933	0.01987071	0.079026611		-0.392680019	1009.010816		-0.901081592
5A	5.00116081	0.050011608	0.099179221	0.01978734	0.098451954		-0.738701939	1008.509804		-0.850980372
7A	7.00287544	0.035014377	0.138787829	0.019824699	0.138322184		-0.33663833	1009.148351		-0.914835119
9A	9.00134378	0.045006719	0.178406863	0.019526918	0.175260781		-1.795086296	1009.080439		-0.908043879
11A	11.00376705	0.022007534	0.217508017	0.019727411	0.216568119		-0.433996532	1011.803353		-1.180335344
13A	13.00475415	0.026009508	0.256982312	0.019814318	0.257172618		0.073999486	1012.112783		-1.211278308
15A	15.00423245	0.030008465	0.296600611	0.019778287	0.296250294		-0.1182502	1011.746564		-1.17465638
18A	18.00731345	0.036014627	0.355996408	0.01976617	0.3554279		-0.159950352	1011.657031		-1.165703054
21A	21.00023395	0.042000468	0.415154983	0.019804196	0.415385039		0.05538385	1011.681652		-1.168165191
24A	24.00081595	0.048001632	0.474579098	0.0196637	0.471437116		-0.666468863	1011.456933		-1.145693315
27A	27.0019654	0.027001965	0.533592799	0.019802281	0.534192801		0.112319325	1012.081327		-1.208132683
30A	30.0051023	0.030005102	0.593061761	0.019800677	0.593613627		0.092967227	1011.871082		-1.187108234
35A	35.0012031	0.035001203	0.69198794	0.01981647	0.69309256		0.159375484	1011.613095		-1.161309545
40A	40.0003524	0.040000352	0.79105343	0.019776162	0.790545713		-0.064223569	1011.318601		-1.131860082

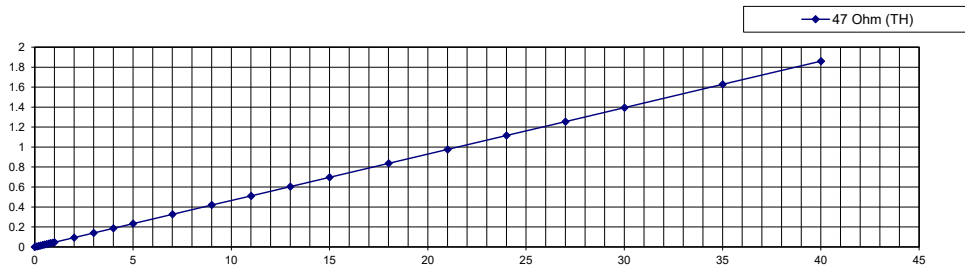
**CURRENT TRANSFORMER CHARACTERISTICS TEST**

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>TURNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

**TEST SETUP**

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	47
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60



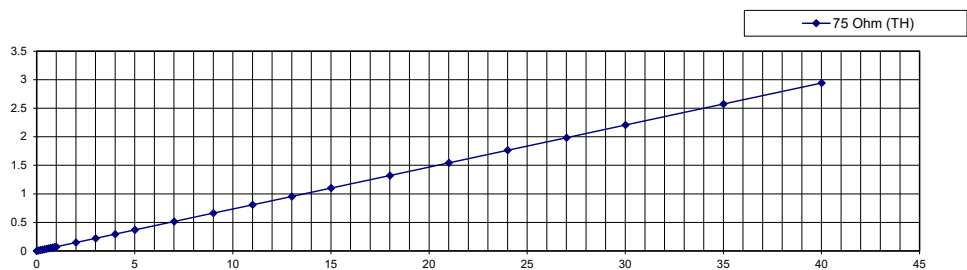
Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error Affected by Core and DCR	Equivalent Turns Ratio	% Absolute Error Affected by turns ratio
0A	0.000545794	0.000545794	2.16425E-05	0.046037663	-0.000520667	104.1566794	1185.27766	-18.52776603
0.1A	0.100225272	0.100225272	0.004610653	0.046535059	0.004118195	-11.95810358	1021.674841	-2.167484134
0.2A	0.200149485	0.200149485	0.009260632	0.046500797	0.008761316	-5.699092477	1015.808214	-1.580821362
0.3A	0.300311458	0.300311458	0.013918243	0.046566183	0.013438564	-3.569422792	1014.110633	-1.41106332
0.4A	0.400038536	0.400038536	0.018562153	0.046589775	0.018091911	-2.599181639	1012.911137	-1.291113676
0.5A	0.500071054	0.500071054	0.023222645	0.046724711	0.022819881	-1.764969475	1012.087096	-1.208709583
0.6A	0.600020956	0.600020956	0.027892776	0.046624305	0.027429766	-1.687983543	1011.049794	-1.104979431
0.7A	0.700083911	0.700083911	0.032558141	0.046536453	0.032033628	-1.637383497	1010.62108	-1.062107984
0.8A	0.800059635	0.800059635	0.037210657	0.046645999	0.036773787	-1.18799308	1010.538541	-1.053854134
0.9A	0.90005548	0.90005548	0.041875063	0.046467081	0.041277156	-1.448517042	1010.210006	-1.021000639
1A	1.00076559	1.00076559	0.046554768	0.046653028	0.046142951	-0.892479894	1010.336536	-1.033653595
2A	2.00017429	2.00017429	0.09318021	0.04658651	0.092635345	-0.588182625	1008.885809	-0.888580879
3A	3.00025427	3.00025427	0.139770446	0.046616199	0.139314657	-0.327164952	1008.882455	-0.888245495
4A	4.00083852	0.040008385	0.186413881	0.046605883	0.185916818	-0.267357666	1008.720002	-0.872000213
5A	5.00160267	0.050016027	0.233055378	0.04654741	0.232265855	-0.339922306	1008.667243	-0.866724256
7A	7.00417986	0.035020899	0.326270159	0.046578371	0.325697497	-0.17582627	1008.968931	-0.896893062
9A	9.00363684	0.045018184	0.419401609	0.04568472	0.410782838	-2.098133126	1008.987382	-0.898738202
11A	11.0052321	0.022010464	0.510843929	0.046578738	0.512064033	0.238271822	1012.532164	-1.253216362
13A	13.0009965	0.026001993	0.603804117	0.04651346	0.604175532	0.061474705	1011.995146	-1.199514594
15A	15.0025718	0.030005144	0.696904309	0.046562207	0.698007055	0.157984981	1011.790092	-1.179009154
18A	18.007676	0.036015352	0.836828592	0.04653468	0.837435653	0.072490486	1011.390839	-1.139083928
21A	21.00612945	0.042012259	0.976360665	0.046497017	0.976176557	-0.018860153	1011.19199	-1.119199036
24A	24.0025061	0.048005012	1.11568324	0.04628757	1.110471892	-0.469291295	1011.14523	-1.114523034
27A	27.0017938	0.027001794	1.25451298	0.046612465	1.258074375	0.283083029	1011.615128	-1.161512781
30A	30.006365	0.030006365	1.39456345	0.046729146	1.401626003	0.503882868	1011.283606	-1.128360635
35A	35.0004041	0.035000404	1.62793063	0.046365333	1.622259602	-0.349575834	1010.496985	-1.049698457
40A	40.0062618	0.040006262	1.86002889	0.046493444	1.859483096	-0.029351936	1010.895215	-1.089521497

**CURRENT TRANSFORMER CHARACTERISTICS TEST**

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>URNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

<b>TEST SETUP</b>	
<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	75
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error Affected by Core and DCR	Equivalent Turns Ratio	% Absolute Error Affected by turns ratio
0A	0.000464335	0.000464335	2.46962E-05	0.072837661	-0.000430514	105.7364369	1410.14335	-41.014335
0.1A	0.100198372	0.100198372	0.00728909	0.073409383	0.006891165	-5.774420456	1030.976123	-3.097612258
0.2A	0.200211219	0.200211219	0.014630972	0.073533658	0.014257928	-2.616393488	1026.305152	-2.630515171
0.3A	0.300326294	0.300326294	0.021992799	0.07367074	0.021660925	-1.532132901	1024.17486	-2.417486038
0.4A	0.400250664	0.400250664	0.029354302	0.073470841	0.028942418	-1.423114558	1022.63711	-2.263716955
0.5A	0.500055684	0.500055684	0.03668706	0.073621967	0.036350748	-0.925188034	1022.272594	-2.227259402
0.6A	0.600175119	0.600175119	0.04405805	0.073752105	0.043799843	-0.589515849	1021.677853	-2.167785286
0.7A	0.700278022	0.700278022	0.05144085	0.073591513	0.051070184	-0.725797136	1020.995023	-2.099502349
0.8A	0.800318797	0.800318797	0.058803002	0.073615876	0.058451834	-0.600781065	1020.762681	-2.076268112
0.9A	0.900080818	0.900080818	0.06614707	0.073716651	0.065886609	-0.395318259	1020.544991	-2.054499076
1A	1.00170586	1.00170586	0.073638528	0.073692647	0.073354021	-0.387855019	1020.225979	-2.022597866
2A	2.00242498	2.00242498	0.147384169	0.073640883	0.146996009	-0.264061504	1018.982395	-1.898239491
3A	3.00450162	3.00450162	0.221177978	0.07371356	0.221008175	-0.076831007	1018.806771	-1.880677063
4A	4.0005823	0.040005823	0.294602631	0.073625058	0.294078769	-0.178136494	1018.469087	-1.846908658
5A	5.00213943	0.050021394	0.368342333	0.073558787	0.367486972	-0.232759562	1018.510292	-1.85102923
7A	7.00068448	0.035003422	0.515352882	0.073699404	0.515481938	0.025036047	1018.819055	-1.881905455
9A	9.00726182	0.045036309	0.663236436	0.072182947	0.649706371	-2.082489143	1018.557787	-1.855778699
11A	11.0043655	0.022008731	0.807393266	0.073537624	0.808770555	0.170294191	1022.212405	-2.221240535
13A	13.00156725	0.026003135	0.954262737	0.073364472	0.953388782	-0.09166826	1021.854366	-2.185436562
15A	15.00345725	0.030006915	1.10113034	0.073393554	1.100692715	-0.039759054	1021.912895	-2.191289521
18A	18.00061065	0.036001221	1.32110208	0.073773952	1.327511847	0.482840643	1021.908768	-2.190876783
21A	21.00432815	0.042008656	1.54269819	0.073764748	1.54891463	0.401341698	1021.148933	-2.114893338
24A	24.00403	0.04800806	1.76397044	0.07320622	1.756779967	-0.409298432	1020.596609	-2.059660932
27A	27.0018601	0.02700186	1.98343025	0.074222826	2.003690032	1.011123545	1021.02885	-2.102885014
30A	30.0062135	0.030006214	2.20642185	0.073621322	2.208632772	0.100103664	1019.961805	-1.99618049
35A	35.003481	0.035003481	2.57432729	0.073553	2.574146687	-0.007016023	1019.78528	-1.978527952
40A	40.0027262	0.040002726	2.94203677	0.073545907	2.941572435	-0.015785276	1019.771233	-1.977123318

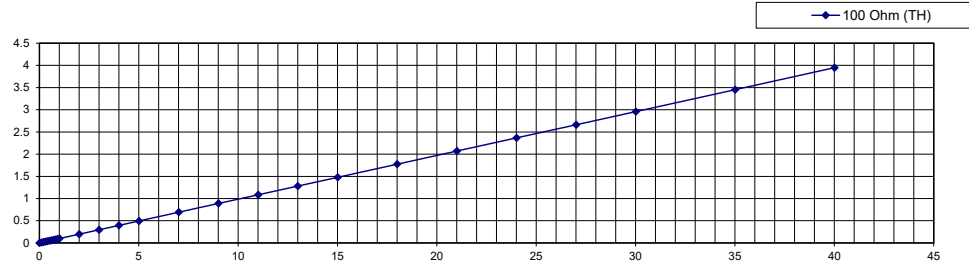
**CURRENT TRANSFORMER CHARACTERISTICS TEST**

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>URNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

**TEST SETUP**

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	100
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error Affected by Core and DCR	Equivalent Turns Ratio	% Absolute Error Affected by turns ratio
0A	0.000842942	0.000842942	7.72383E-05	0.097519026	-0.000760739	110.1530509	1091.353342	-9.135334197
0.1A	0.100596157	0.100596157	0.009805075	0.098400459	0.009055766	-8.274386258	1025.960135	-2.596013486
0.2A	0.200471325	0.200471325	0.019632837	0.098569169	0.018917349	-3.782176624	1021.102172	-2.110217184
0.3A	0.300318586	0.300318586	0.029474699	0.098724881	0.028805974	-2.321477585	1018.902996	-1.890299573
0.4A	0.400355522	0.400355522	0.039350833	0.098824623	0.038722041	-1.62386071	1017.400371	-1.740037112
0.5A	0.500607857	0.500607857	0.049258232	0.098821166	0.04862771	-1.296631854	1016.292777	-1.629277712
0.6A	0.600184418	0.600184418	0.059098504	0.098611031	0.058341862	-1.296911495	1015.566174	-1.556617401
0.7A	0.700493068	0.700493068	0.068990044	0.098992087	0.068500328	-0.714909583	1015.353856	-1.535385607
0.8A	0.800078825	0.800078825	0.078848246	0.098768448	0.078179601	-0.855266981	1014.707201	-1.470720106
0.9A	0.900178593	0.900178593	0.088734944	0.098736452	0.088037498	-0.792214446	1014.457834	-1.445783408
1A	1.00319078	1.00319078	0.098906002	0.098805271	0.098277595	-0.639420564	1014.287059	-1.428705913
2A	2.00114392	2.00114392	0.197509033	0.098813766	0.196897625	-0.310520879	1013.191088	-1.319108782
3A	3.00106304	3.00106304	0.296314807	0.098818676	0.295718134	-0.20177079	1012.795503	-1.279550299
4A	4.00258432	0.040025843	0.395283814	0.098724265	0.394309253	-0.247156506	1012.584927	-1.258492714
5A	5.0034482	0.050034482	0.494093365	0.098825797	0.493626815	-0.09451471	1012.652376	-1.265237593
7A	7.00400222	0.035020011	0.691799711	0.098670751	0.690247216	-0.224918647	1012.432082	-1.243208238
9A	9.00354098	0.045017705	0.889095702	0.097564225	0.877580557	-1.312146824	1012.662749	-1.266274932
11A	11.00308085	0.022006162	1.08417926	0.09852194	1.083201933	-0.090225773	1014.87653	-1.487652974
13A	13.00197175	0.026003944	1.28111387	0.098071768	1.274283411	-0.536023535	1014.895869	-1.489586948
15A	15.00280435	0.030005609	1.47733906	0.098918432	1.483210939	0.395889688	1015.528849	-1.552884888
18A	18.0017142	0.036003428	1.77398652	0.098813377	1.777967234	0.223891291	1014.760484	-1.47604842
21A	21.0019179	0.042003836	2.07044678	0.098732209	2.072722814	0.109808885	1014.366469	-1.436646925
24A	24.00912985	0.04801826	2.36735546	0.098321817	2.359778336	-0.321094729	1014.17511	-1.41751104
27A	27.0057553	0.027005755	2.66198912	0.098822337	2.667928908	0.222636663	1014.49533	-1.449532972
30A	30.0022661	0.030002266	2.95811132	0.098790672	2.963101073	0.168396318	1014.237223	-1.423722282
35A	35.0018011	0.035001801	3.45201874	0.099160915	3.469967683	0.517265429	1013.951654	-1.395165369
40A	40.0034997	0.0400035	3.94799175	0.098691159	3.947148808	-0.021355729	1013.261988	-1.32619882



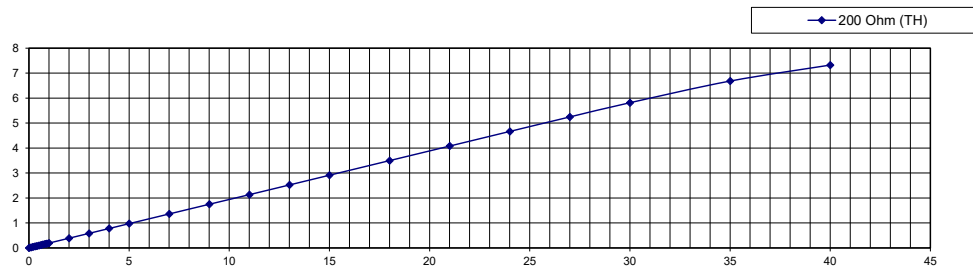
# CURRENT TRANSFORMER CHARACTERISTICS TEST

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>URNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

## TEST SETUP

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	200
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error		Equivalent Turns Ratio	% Absolute Error	
						Affected by Core and DCR			Affected by turns ratio	
0A	0.000533581	0.000533581	6.71669E-05	0.191032978	-0.00043165	115.5605024	1588.823162	-58.88231617		
0.1A	0.100300642	0.100300642	0.019125966	0.194024579	0.018927208	-1.050114078	1048.842648	-4.884264771		
0.2A	0.200143943	0.200143943	0.03849802	0.194153242	0.038325014	-0.451418274	1039.762268	-3.976226829		
0.3A	0.300434237	0.300434237	0.057969706	0.193798035	0.057689983	-0.48487163	1036.521519	-3.652151886		
0.4A	0.400582982	0.400582982	0.077378336	0.194429616	0.077351614	-0.034546152	1035.38795	-3.538795033		
0.5A	0.500886471	0.500886471	0.096880305	0.194421687	0.096849611	-0.031691701	1034.031579	-3.403157863		
0.6A	0.600774394	0.600774394	0.116300683	0.194093463	0.116072801	-0.196326474	1033.139924	-3.313992404		
0.7A	0.700357557	0.700357557	0.135629124	0.194340341	0.135574145	-0.040552638	1032.753934	-3.275393418		
0.8A	0.800754139	0.800754139	0.15514023	0.194274782	0.155032755	-0.069324331	1032.297218	-3.229721781		
0.9A	0.90003529	0.90003529	0.174428054	0.194351692	0.1743898	-0.021935815	1031.984557	-3.19845568		
1A	1.00145841	1.00145841	0.194139809	0.194741209	0.19449164	0.180897862	1031.687849	-3.168784924		
2A	2.00017925	2.00017925	0.388631913	0.194683267	0.388667849	0.060672468	1029.3438	-2.934379967		
3A	3.00145101	3.00145101	0.58356277	0.194512082	0.583284903	-0.047638345	1028.664323	-2.866432346		
4A	4.00121827	0.040012183	0.778029581	0.194300161	0.776903772	-0.144909686	1028.551707	-2.855170747		
5A	5.00147247	0.050014725	0.972379133	0.194327961	0.971392364	-0.101582987	1028.708309	-2.87083094		
7A	7.00408638	0.035020432	1.36154301	0.193974682	1.358081845	-0.254856887	1028.84541	-2.884540974		
9A	9.0034835	0.045017418	1.74937543	0.192214314	1.730064819	-1.116178476	1029.33691	-2.933691026		
11A	11.00345615	0.022006912	2.1337988	0.194402565	2.138566519	0.222939927	1031.348987	-3.134898661		
13A	13.0095679	0.026019136	2.52379207	0.194998471	2.536312267	0.493637844	1030.95402	-3.095401992		
15A	15.0023545	0.030004709	2.91238241	0.194986873	2.924728612	0.422131557	1030.246196	-3.024619627		
18A	18.0009042	0.036001808	3.49706024	0.194324237	3.49747839	0.01195576	1029.487796	-2.94877963		
21A	21.00396645	0.042007933	4.08062802	0.195185126	4.099128254	0.451321182	1029.447739	-2.944773927		
24A	24.007073	0.048014146	4.66678975	0.193833885	4.652850647	-0.299582009	1028.847421	-2.884742129		
27A	27.0032643	0.027003264	5.24755315	0.189561001	5.118232222	-2.526671758	1029.175447	-2.917544723		
30A	30.0006838	0.030000684	5.81574699	0.173563133	5.206479086	-11.70210988	1031.70526	-3.170525993		
35A	35.0032618	0.035003262	6.6840101	0.12807752	4.482605514	-49.10993348	1047.373097	-4.737309718		
40A	40.0017025	0.040001703	7.32419915	0.183097186	7.323665569	-0.007285716	1092.316079	-9.231607936		

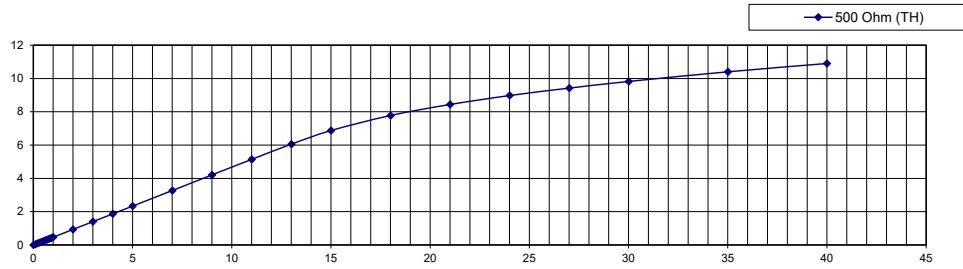
**CURRENT TRANSFORMER CHARACTERISTICS TEST**

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>URNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

**TEST SETUP**

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	500
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error		Equivalent Turns Ratio	% Absolute Error
						Affected by Core and DCR	Affected by turns ratio		
0A	0.000521741	0.000521741	0.000140093	0.450701613	-0.000286591	148.8824158	1862.125812	-86.2125812	
0.1A	0.100219233	0.100219233	0.045073913	0.461743948	0.045753884	1.486147759	1111.721009	-11.17210093	
0.2A	0.200036261	0.200036261	0.091163822	0.462642679	0.092023571	0.934270554	1097.125244	-9.712524449	
0.3A	0.300771831	0.300771831	0.137768396	0.463780596	0.138970398	0.864934121	1091.585007	-9.158500691	
0.4A	0.400103559	0.400103559	0.183836524	0.464594302	0.185364093	0.824091069	1088.204755	-8.820475468	
0.5A	0.500044378	0.500044378	0.230268459	0.464513388	0.231755568	0.641671148	1085.785652	-8.578565248	
0.6A	0.600478325	0.600478325	0.276921372	0.466076267	0.279346955	0.868304906	1084.203651	-8.420365077	
0.7A	0.700324868	0.700324868	0.323457476	0.465918885	0.325772841	0.71072994	1082.560955	-8.256095463	
0.8A	0.800007992	0.800007992	0.369901726	0.46728857	0.37331285	0.913743995	1081.379101	-8.137910122	
0.9A	0.900212033	0.900212033	0.416725929	0.466035373	0.41900891	0.544852684	1080.100817	-8.010081729	
1A	1.00048122	1.00048122	0.463454917	0.468156699	0.467860245	0.941590568	1079.372754	-7.937275375	
2A	2.00043949	2.00043949	0.93159208	0.466723824	0.933131027	0.164922954	1073.667076	-7.366707647	
3A	3.00071292	3.00071292	1.39844352	0.46618268	1.398358649	-0.006069314	1072.875979	-7.287597857	
4A	4.00342158	0.040034216	1.86588893	0.46827064	1.874163045	0.441483178	1072.792039	-7.279203913	
5A	5.00659624	0.050065962	2.33564617	0.467137275	2.338245984	0.111186502	1071.779687	-7.177968656	
7A	7.00490344	0.035024517	3.26912995	0.469249307	3.286524342	0.52926404	1071.371213	-7.1371213	
9A	9.00239726	0.045011986	4.20645254	0.465636532	4.191323295	-0.360965821	1070.069991	-7.006999061	
11A	11.00328565	0.022006571	5.13813927	0.457738879	5.036109895	-2.02595609	1070.746147	-7.074614679	
13A	13.0030647	0.026006129	6.05351589	0.409999335	5.330726144	-13.55893599	1074.00929776	-7.400929776	
15A	15.0026646	0.030005329	6.87335052	0.300988157	4.515102631	-52.23021673	1091.364725	-9.136472499	
18A	18.00814285	0.036016286	7.77796388	0.220138002	3.963754839	-96.22716832	1157.638627	-15.76386268	
21A	21.00318035	0.042006361	8.43728545	0.178889707	3.756731032	-124.5911506	1244.664559	-24.46645591	
24A	24.00667865	0.048013357	8.97458038	0.148728158	3.569947366	-151.3925126	1337.481956	-33.74819565	
27A	27.0098928	0.027009893	9.42124289	0.133653348	3.609440874	-161.0166843	1433.456982	-43.3456982	
30A	30.0047615	0.030004762	9.82151712	0.115731529	3.471975186	-182.8798189	1527.501359	-52.75013592	
35A	35.0065582	0.035006558	10.4003827	0.100002519	3.500222268	-197.1349219	1682.945677	-68.29456766	
40A	40.0002244	0.040002244	10.8997619	0.272492519	10.89924016	-0.004786945	1834.912761	-83.49127608	

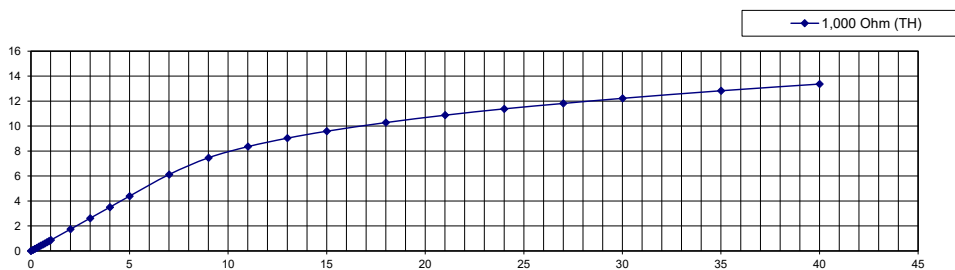
**CURRENT TRANSFORMER CHARACTERISTICS TEST**

<b>PRODUCT:</b>	CR8448-100
<b>Lot #:</b>	30467
<b>URNS/RATIO:</b>	1000
<b>DATE:</b>	May 27, 2020
<b>TESTER:</b>	AG

**TEST SETUP**

<b>FULL SCALE PRIMARY CURRENT(Amps):</b>	30
<b>Burden (Ohms):</b>	1000
<b>MEASUREMENT CT TURNS RATIO:</b>	1000
<b>FREQUENCY(Hz):</b>	60

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE



Input Current R	Primary Current	MEASURED CURRENT	Secondary Voltage	Slope	Normalized Output	% Linear Error Affected by Core and DCR	Equivalent Turns Ratio	% Absolute Error Affected by turns ratio
0A	0.000489464	0.000489464	0.000249893	0.81402495	-9.1028E-05	374.5225726	1958.69699	-95.86969899
0.1A	0.10040233	0.10040233	0.081581459	0.851316604	0.084984707	4.004542177	1230.700356	-23.07003558
0.2A	0.200326235	0.200326235	0.166648338	0.858549365	0.171500498	2.829239634	1202.089606	-20.20896062
0.3A	0.300409497	0.300409497	0.252574759	0.863699765	0.258974148	2.471053274	1189.388434	-18.93884337
0.4A	0.400219222	0.400219222	0.338780395	0.868626265	0.347151464	2.411359391	1181.352959	-18.13529588
0.5A	0.500538331	0.500538331	0.425920208	0.87060895	0.435283687	2.151121055	1175.192728	-17.51927276
0.6A	0.600120064	0.600120064	0.512616956	0.871952423	0.52278668	1.945291408	1170.698817	-17.06988171
0.7A	0.700254501	0.700254501	0.599929421	0.873304721	0.611046098	1.819286174	1167.228138	-16.7228138
0.8A	0.800299634	0.800299634	0.687299308	0.872699401	0.697931548	1.523392936	1164.412105	-16.4412105
0.9A	0.900120398	0.900120398	0.774412829	0.874526744	0.786689897	1.560598196	1162.3263	-16.23262997
1A	1.00216141	1.00216141	0.863650423	0.874913926	0.87631551	1.445265668	1160.378532	-16.0378532
2A	2.00017725	2.00017725	1.73682838	0.881425422	1.762517613	1.457530591	1151.626305	-15.16263052
3A	3.00118676	3.00118676	2.61914361	0.883288431	2.650424081	1.180206254	1145.865675	-14.58656748
4A	4.0035556	0.040035556	3.50452441	0.887675744	3.553369733	1.374619786	1142.396266	-14.2396266
5A	5.00343002	0.0500343	4.39208868	0.862512597	4.315031957	-1.785774102	1139.191484	-13.91914837
7A	7.00688062	0.035034403	6.12009006	0.672054753	4.708517964	-29.97911673	1144.898286	-14.4898286
9A	9.00347678	0.045017384	7.461912	0.445945739	4.014572638	-85.87064359	1206.591123	-20.6591123
11A	11.0062186	0.022012437	8.35502618	0.338716717	3.727500763	-124.1455257	1317.317069	-31.73170691
13A	13.00219635	0.026004393	9.03109721	0.278569541	3.621526404	-149.3726734	1439.713918	-43.97139182
15A	15.0033063	0.030006613	9.58854549	0.231424221	3.471639016	-176.196501	1564.711386	-56.4711386
18A	18.0017319	0.036003464	10.2824538	0.19615906	3.53071335	-191.228791	1750.723344	-75.07233439
21A	21.0057624	0.042011525	10.8717216	0.169984615	3.570166971	-204.5157744	1932.146828	-93.21468276
24A	24.0001781	0.048000356	11.3807262	0.144080857	3.457476756	-229.1627682	2108.84417	-110.884417
27A	27.0039151	0.027003915	11.8135072	0.13679071	3.693395269	-219.8549394	2285.850818	-128.5850818
30A	30.0043842	0.030004384	12.2239435	0.121297894	3.638979155	-235.9168321	2454.558482	-145.4558482
35A	35.0034174	0.035003417	12.8303157	0.107339919	3.756774527	-241.5247736	2728.180523	-172.8180523
40A	40.0015924	0.040001592	13.3668194	0.334157182	13.36632994	-0.003661916	2992.603641	-199.2603641