

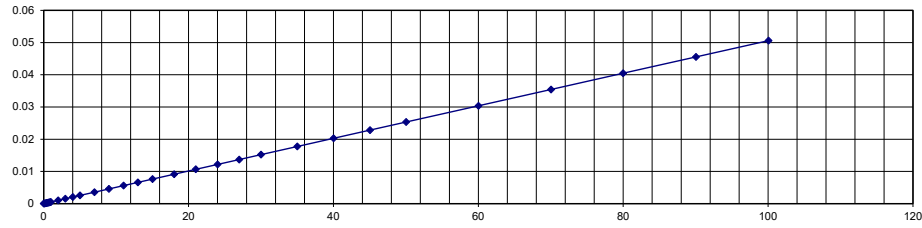
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	1
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001164366	0.001164366	2.87646E-05	0.000322924	-0.00116399	102.4712035	40.47918459	97.97604077
0.1A	0.100393834	0.100393834	6.08081E-05	0.000459444	-0.001118241	105.4378401	1650.993218	17.4503391
0.2A	0.200679658	0.200679658	0.000106884	0.000494009	-0.001065228	110.033893	1877.548278	6.122586092
0.3A	0.300232066	0.300232066	0.000156064	0.000520611	-0.001008062	115.4815571	1923.778859	3.811057036
0.4A	0.400259689	0.400259689	0.000208139	0.000544159	-0.000946561	121.9889791	1923.038869	3.848056567
0.5A	0.501155727	0.501155727	0.000263043	0.000525908	-0.00090804	129.2008685	1905.226249	4.738687568
0.6A	0.601008264	0.601008264	0.000315556	0.000527889	-0.0008471	137.2513068	1904.601484	4.769925799
0.7A	0.701221685	0.701221685	0.000368458	0.00052109	-0.000798967	146.116754	1903.127661	4.843616936
0.8A	0.800632277	0.800632277	0.000420259	0.000512301	-0.000754202	155.7224086	1905.090933	4.745453373
0.9A	0.901001225	0.901001225	0.000471678	0.000503916	-0.000710337	166.4020861	1910.202323	4.489883856
1A	0.999904314	0.999904314	0.000521517	0.000501905	-0.000662509	178.7185575	1917.298375	4.13508125
2A	2.00382627	2.00382627	0.001025391	0.000500874	-0.00160702	738.071326	1954.206657	2.289667149
3A	3.00322214	3.00322214	0.001525963	0.000524773	0.000411644	-270.6994923	1968.083739	1.595813051
4A	4.02070467	0.040207047	0.00205991	0.000504487	0.000864029	-138.4075621	1951.883613	2.405819371
5A	5.01547359	0.050154736	0.002561758	0.000498465	0.001335673	-91.79533838	1957.824544	2.108772776
7A	7.00447912	0.035022396	0.003553209	0.000507655	0.002391494	-48.57692936	1971.311028	1.434448608
9A	9.0029829	0.045014915	0.004567759	0.00051029	0.003429765	-33.17994918	1970.984509	1.45077455
11A	11.0243707	0.022048741	0.005599253	0.000506553	0.004420064	-26.67809803	1968.900227	1.554988647
13A	13.0104815	0.026020963	0.006605324	0.000505804	0.005416385	-21.95077288	1969.696226	1.515188687
15A	15.02014765	0.030040295	0.007621821	0.000505053	0.00642161	-18.69018296	1970.67711	1.466144494
18A	18.00664015	0.03601328	0.009130159	0.000509211	0.008004809	-14.05842672	1972.215433	1.389228351
21A	21.0120128	0.042024026	0.010660527	0.000506351	0.009475093	-12.51105085	1971.01072	1.449464004
24A	24.01116655	0.048022333	0.012179152	0.00050587	0.010982152	-10.89950156	1971.497372	1.425131423
27A	26.9912367	0.026991237	0.013686679	0.000509192	0.012579361	-8.80265629	1972.080787	1.395960627
30A	30.0079791	0.030007979	0.015222781	0.000504391	0.013971376	-8.95691661	1971.254772	1.437261393
35A	35.0208125	0.035020813	0.017751207	0.000507277	0.016600885	-6.929277838	1972.869399	1.356530032
40A	40.0204541	0.040020454	0.02028741	0.00050662	0.019110789	-6.156838131	1972.674417	1.366279156
45A	45.0430264	0.045043026	0.022831944	0.000503899	0.021532771	-6.033468231	1972.807292	1.359635406
50A	50.0321054	0.050032105	0.025345937	0.000504305	0.02406706	-5.313804955	1973.969492	1.301525394
60A	60.024946	0.030012473	0.030385373	0.000505144	0.029156849	-4.213501711	1975.455296	1.227235223
70A	70.0437692	0.035021885	0.035446317	0.000507048	0.034351213	-3.187963204	1976.052102	1.197394923
80A	80.0023252	0.040001163	0.040495787	0.000503661	0.039129719	-3.491125658	1975.571582	1.221420897
90A	90.0468588	0.045023429	0.045554831	0.000504307	0.044246905	-2.955970492	1976.669816	1.166509219
100A	100.0694898	0.050034745	0.050609315	0.000505742	0.049444949	-2.354873756	1977.293907	1.135304642

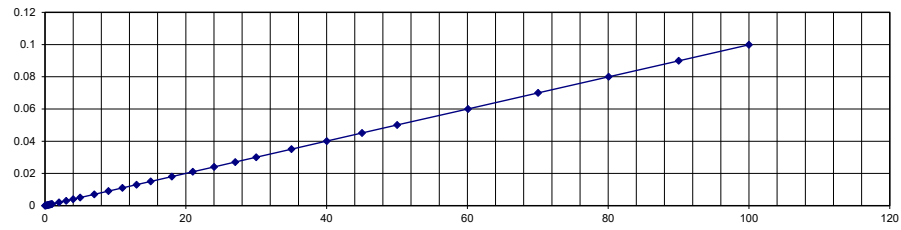
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	2
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001128849	0.001128849	3.0762E-05	0.000851723	-0.001127887	102.7274045	73.39229892	96.33038505
0.1A	0.100220259	0.100220259	0.000115161	0.001009097	-0.001027717	111.205474	1740.531592	12.9734204
0.2A	0.201257681	0.201257681	0.000217117	0.000988162	-0.000929973	123.3465922	1853.909083	7.304545829
0.3A	0.300200724	0.300200724	0.000314889	0.000988754	-0.000832024	137.8461329	1906.709139	4.66454306
0.4A	0.400730101	0.400730101	0.000414288	0.000967507	-0.000741139	155.8987645	1934.549836	3.272508211
0.5A	0.500360363	0.500360363	0.000510681	0.000968055	-0.000644472	179.2401304	1959.582002	2.020899912
0.6A	0.601907174	0.601907174	0.000608984	0.000979652	-0.000539189	212.9443312	1976.759912	1.162004382
0.7A	0.702730656	0.702730656	0.000707755	0.00099054	-0.000432766	263.5424603	1985.800641	0.709967927
0.8A	0.800128374	0.800128374	0.000804232	0.001005641	-0.000324207	348.0613077	1989.795284	0.510235821
0.9A	0.901221466	0.901221466	0.000905895	0.001016856	-0.000212436	526.4320281	1989.681544	0.515922821
1A	1.00264861	1.00264861	0.001009032	0.001007809	-0.00011837	952.4378291	1987.347497	0.63262513
2A	2.00258724	2.00258724	0.002016779	0.001006075	0.000885903	-127.6522612	1985.926026	0.703698718
3A	3.00732606	3.00732606	0.003027621	0.000998159	0.001872941	-61.65064211	1986.593179	0.670341069
4A	4.00375552	0.040037555	0.004022217	0.001005422	0.002896614	-38.85924385	1990.820469	0.458976531
5A	5.00545008	0.050054501	0.005029342	0.000995546	0.003854305	-30.4863613	1990.49898	0.475051009
7A	7.01047296	0.035052365	0.007025434	0.001002269	0.005897532	-19.12497866	1995.741023	0.212948851
9A	9.01279976	0.045063999	0.009032304	0.000999402	0.007878563	-14.64405096	1995.681266	0.215936713
11A	11.0081111	0.022016222	0.011026422	0.00100485	0.009932647	-11.01192204	1996.678669	0.166066558
13A	13.01242865	0.026024857	0.01304046	0.000997531	0.011851456	-10.03255111	1995.70088	0.214955992
15A	15.02094735	0.030041895	0.01504402	0.000997318	0.013851812	-8.606871663	1996.932622	0.153368911
18A	18.0101083	0.036020217	0.018025164	0.001005017	0.016971624	-6.207658638	1998.329458	0.083527117
21A	21.0021724	0.042004345	0.021032241	0.000996952	0.019809312	-6.173502127	1997.140742	0.142962894
24A	24.01972765	0.048039455	0.024040599	0.001015517	0.023263591	-3.340016979	1998.263666	0.086816681
27A	27.0161651	0.027016165	0.027083532	0.000997945	0.025831801	-4.845695963	1995.025265	0.248736762
30A	30.0055215	0.030005522	0.030066745	0.000996468	0.028770707	-4.504715973	1995.927467	0.203626629
35A	35.0149586	0.035014959	0.035058491	0.001007246	0.034139842	-2.690842096	1997.516562	0.124171915
40A	40.0286117	0.040028612	0.040108475	0.001002063	0.038982347	-2.888817255	1996.017615	0.199119261
45A	45.036191	0.045036191	0.045126386	0.000999011	0.043862799	-2.8807703	1996.002565	0.199871756
50A	50.0293704	0.05002937	0.050114627	0.000987313	0.048265784	-3.830544594	1996.597544	0.170122787
60A	60.0968982	0.030048449	0.060054425	0.00100014	0.058976486	-1.827743636	2001.414494	-0.07072468
70A	70.0492658	0.035024633	0.07000819	0.000996546	0.068678437	-1.936200722	2001.173468	-0.058673421
80A	80.0751282	0.040037564	0.079999418	0.000996077	0.078632175	-1.738783951	2001.892759	-0.094637938
90A	90.0322314	0.045016116	0.089917464	0.000999314	0.088841654	-1.210928739	2002.552737	-0.12763683
100A	99.989134	0.049994567	0.09986754	0.000998784	0.098738691	-1.143268743	2002.435116	-0.121755778

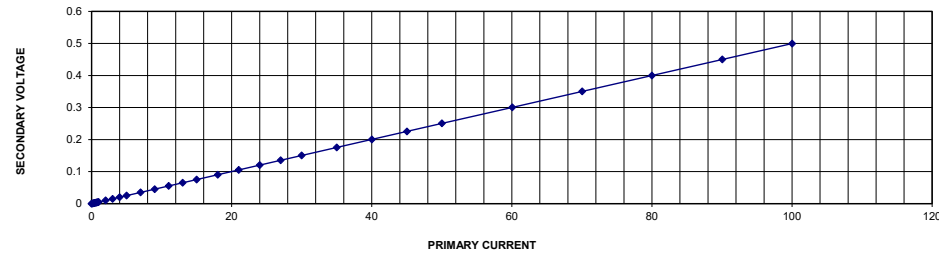
CURRENT TRANSFORMER CHARACTERISTICS TEST

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	10
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001167437	0.001167437	2.30938E-05	0.005011209	-0.001161587	101.988129	505.5187343	74.72406329
0.1A	0.099710321	0.099710321	0.000516913	0.004996369	-0.000669248	177.2378963	1928.958263	3.552086873
0.2A	0.200673617	0.200673617	0.001021363	0.004988096	-0.00166458	713.5864615	1964.763555	1.761822255
0.3A	0.300968409	0.300968409	0.001521643	0.004977867	0.000330743	-360.0674346	1977.917636	1.104118208
0.4A	0.400938467	0.400938467	0.00201928	0.004988676	0.000832715	-142.493567	1985.551224	0.722438796
0.5A	0.501353539	0.501353539	0.002520219	0.005000816	0.00133974	-88.11257828	1989.325533	0.533723325
0.6A	0.599746058	0.599746058	0.003012262	0.005002176	0.001832598	-64.37108783	1991.015867	0.449206674
0.7A	0.701468881	0.701468881	0.003521097	0.005000443	0.002340209	-50.46082196	1992.188437	0.390578131
0.8A	0.801318454	0.801318454	0.004020388	0.005007078	0.002844826	-41.32278015	1993.137214	0.343139286
0.9A	0.901005179	0.901005179	0.004519527	0.005020369	0.003355941	-34.67241581	1993.582928	0.320853601
1A	1.00122288	1.00122288	0.005022657	0.005014154	0.003852849	-30.36215281	1993.412897	0.329355174
2A	2.00737164	2.00737164	0.010067642	0.005011573	0.008892653	-13.21302928	1993.884606	0.305769713
3A	3.00163382	3.00163382	0.01505046	0.005032678	0.01393882	-7.975139372	1994.380132	0.280993407
4A	4.00270325	0.040027033	0.02008852	0.005013272	0.018899203	-6.292946187	1992.532665	0.373366727
5A	5.00521486	0.050052149	0.025114384	0.005001242	0.023864855	-5.235850381	1992.967432	0.351628379
7A	7.00951796	0.03504759	0.035138389	0.005021294	0.034029417	-3.25866445	1994.831897	0.258405129
9A	9.00774958	0.045038748	0.045172099	0.005023514	0.044083118	-2.470290256	1994.095882	0.2952059
11A	11.0118615	0.022023723	0.055239783	0.004979167	0.053662463	-2.939334402	1993.465756	0.326712184
13A	13.0051976	0.026010395	0.065164937	0.005000231	0.063861553	-2.040952171	1995.735483	0.213225866
15A	15.01255035	0.030025101	0.075202164	0.005017581	0.074159246	-1.406321589	1996.292345	0.185382765
18A	18.0150513	0.036030103	0.090267455	0.005015032	0.089178626	-1.220951859	1995.741588	0.212920594
21A	21.0056511	0.042011302	0.105265409	0.005004268	0.103950469	-1.264967856	1995.49418	0.225291007
24A	24.0042937	0.048008587	0.12027142	0.005031304	0.119605464	-0.556793903	1995.843543	0.207822856
27A	27.0014093	0.027001409	0.13535082	0.004993422	0.133661989	-1.263509016	1994.92026	0.253987009
30A	30.0049679	0.030004968	0.150348855	0.005019112	0.149430861	-0.61432708	1995.689818	0.215509124
35A	35.0106929	0.035010693	0.17547315	0.005003347	0.174003222	-0.844770486	1995.216527	0.239173629
40A	40.029064	0.040029064	0.200581804	0.004996923	0.198854701	-0.868524928	1995.647821	0.217608971
45A	45.0240262	0.045024026	0.225541244	0.004992742	0.223625902	-0.856493674	1996.265756	0.186712192
50A	50.0299103	0.05002991	0.250534331	0.004965607	0.247261432	-1.323659168	1996.928329	0.153583542
60A	60.0803814	0.030040191	0.30044102	0.005001756	0.29933998	-0.367822486	1999.739629	0.013018529
70A	70.0356558	0.035017828	0.350234875	0.004983685	0.347868225	-0.680329464	1999.676811	0.016159442
80A	80.0073456	0.040003673	0.399930638	0.004982915	0.397502385	-0.610877511	2000.530542	-0.0265271
90A	90.051742	0.045025871	0.449981014	0.004993171	0.448476324	-0.335511618	2001.234257	-0.061712826
100A	100.0218094	0.050010905	0.499763267	0.004996543	0.49859583	-0.234144997	2001.383775	-0.069188759

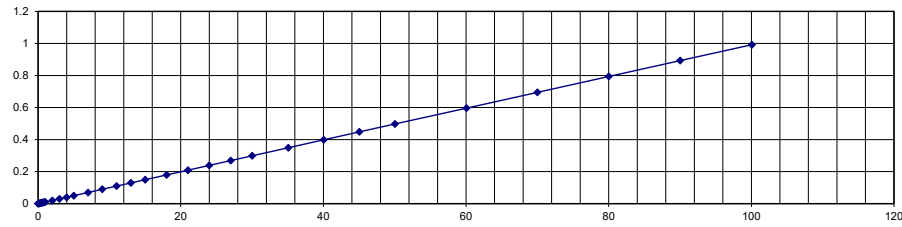
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	20
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.00117051	0.00117051	2.74581E-05	0.009958605	-0.001158853	102.3694249	852.5771453	57.37114274
0.1A	0.100820443	0.100820443	0.001019832	0.009942942	-0.000168058	706.8345969	1977.196196	1.140190223
0.2A	0.200735109	0.200735109	0.002013278	0.00996142	0.000829097	-142.8277847	1994.112001	0.294399952
0.3A	0.300843909	0.300843909	0.003010504	0.009952303	0.00182358	-65.0875666	1998.62823	0.068588517
0.4A	0.401462913	0.401462913	0.004011895	0.009955127	0.002826105	-41.95846626	2001.363151	-0.068157571
0.5A	0.5006602	0.5006602	0.004999416	0.009945825	0.003808969	-31.25379356	2002.874628	-0.14373138
0.6A	0.601272388	0.601272388	0.006000087	0.009951203	0.004812874	-24.66745159	2004.212085	-0.210604264
0.7A	0.70173208	0.70173208	0.006999782	0.009935936	0.005801856	-20.64730136	2005.011176	-0.250558795
0.8A	0.802015503	0.802015503	0.007996192	0.009933891	0.006796625	-17.64945346	2005.993631	-0.299681526
0.9A	0.900632158	0.900632158	0.008975839	0.009949276	0.007790128	-15.22067961	2006.792143	-0.339607139
1A	1.00081773	1.00081773	0.009972613	0.009955747	0.008793378	-13.41048661	2007.132412	-0.35662058
2A	2.00098614	2.00098614	0.019930036	0.009955417	0.018750142	-6.292718562	2008.010552	-0.400527624
3A	3.00159078	3.00159078	0.029891473	0.009958811	0.028271767	-4.0725408	2008.325786	-0.41628929
4A	3.99671222	0.039967122	0.0398017	0.009966627	0.038663232	-2.944574266	2008.312339	-0.415616925
5A	5.0057189	0.050057189	0.049858073	0.009964203	0.048707471	-2.362270013	2007.986498	-0.399324897
7A	7.0059208	0.035029604	0.069788512	0.009961222	0.068617023	-1.707285129	2007.757621	-0.387881033
9A	9.01044252	0.045052213	0.089755998	0.009924957	0.088257742	-1.697591046	2007.763885	-0.388194226
11A	11.0156228	0.022031246	0.109657325	0.009946308	0.108394271	-1.165240871	2009.09931	-0.454965503
13A	13.01079985	0.0260216	0.129501971	0.009950545	0.128294034	-0.941538216	2009.359356	-0.467967781
15A	15.01278235	0.030025565	0.149422787	0.009940041	0.148057162	-0.922363516	2009.4368	-0.471840015
18A	18.03434445	0.036068689	0.179457238	0.009931208	0.177932316	-0.85702346	2009.87652	-0.493826
21A	21.0148581	0.042029716	0.209057339	0.00995269	0.207983864	-0.516133616	2010.439643	-0.521982153
24A	24.0098239	0.048019648	0.238865306	0.009996132	0.238834856	-0.012749502	2010.323249	-0.516162443
27A	27.005309	0.027005309	0.26880857	0.009906387	0.266354539	-0.921339953	2009.259526	-0.462976311
30A	30.0195672	0.030019567	0.298668979	0.009947982	0.297463603	-0.405217925	2010.223311	-0.511165574
35A	35.0805606	0.035080561	0.34901565	0.009955955	0.348089983	-0.265927598	2010.257168	-0.512858378
40A	40.0413585	0.040041359	0.398405132	0.009933598	0.396584241	-0.459143655	2010.082466	-0.504123275
45A	45.0366739	0.045036674	0.448026586	0.009904121	0.444878137	-0.707710527	2010.446492	-0.522324584
50A	50.0375667	0.050037567	0.497556031	0.009821838	0.49029037	-1.481909715	2011.333944	-0.566697181
60A	60.0728558	0.030036428	0.596121016	0.009917675	0.594612577	-0.253684311	2015.458412	-0.772920578
70A	69.9994928	0.034999746	0.69457018	0.009917994	0.693084064	-0.214420755	2015.620446	-0.781022301
80A	80.0267642	0.040013382	0.794020601	0.009894004	0.79061459	-0.430805524	2015.735211	-0.786760569
90A	90.0184032	0.045009202	0.892877914	0.009867899	0.887121979	-0.648832364	2016.365324	-0.81826618
100A	100.081011	0.050040506	0.992174709	0.009913716	0.991004199	-0.118113479	2017.407017	-0.870350849

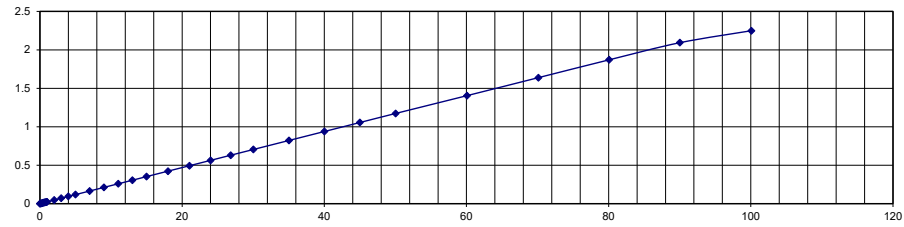
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	47
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001192848	0.001192848	2.64365E-05	0.023589016	-0.001164709	102.2697898	2120.701549	-6.035077436
0.1A	0.101397571	0.101397571	0.002390167	0.023552559	0.001195325	-99.95965895	1993.871248	0.306437609
0.2A	0.200498778	0.200498778	0.004724254	0.023509711	0.003520821	-34.18048111	1994.694182	0.265290905
0.3A	0.301035131	0.301035131	0.007087835	0.023504763	0.005882912	-20.48174764	1996.188026	0.190598705
0.4A	0.401499227	0.401499227	0.00944922	0.023511845	0.00824714	-14.57571475	1997.039378	0.148031119
0.5A	0.499660073	0.499660073	0.011757162	0.023484271	0.010541305	-11.53421631	1997.422765	0.128861746
0.6A	0.600671263	0.600671263	0.014129336	0.023490379	0.012917148	-9.384333749	1998.080346	0.095982707
0.7A	0.701160889	0.701160889	0.016489876	0.023465966	0.01526057	-8.055437804	1998.472407	0.076379644
0.8A	0.80051457	0.80051457	0.018821306	0.023481114	0.017604147	-6.914045449	1999.020949	0.048952528
0.9A	0.902032039	0.902032039	0.021205052	0.023473035	0.019980582	-6.128298431	1999.311159	0.034420494
1A	1.00057449	1.00057449	0.023518142	0.023495359	0.022316009	-5.386865087	1999.605268	0.019736614
2A	2.0048807	2.0048807	0.047011147	0.023475212	0.045769033	-2.714579777	1999.999972	1.39328E-06
3A	3.00141349	3.00141349	0.070508406	0.02349233	0.069317348	-1.7182682	2000.703763	-0.035188166
4A	4.00759752	0.040075975	0.094146014	0.023473916	0.092881159	-1.361798664	2000.691014	-0.034550714
5A	5.00945957	0.050094596	0.117663639	0.023433594	0.116196796	-1.262378496	2000.997095	-0.049854735
7A	7.00615284	0.035030764	0.164453339	0.023518194	0.163579213	-0.534374731	2002.325921	-0.116296052
9A	9.01482278	0.045074114	0.211693628	0.023347249	0.209278465	-1.154042842	2001.461615	-0.073080768
11A	11.0312418	0.022062484	0.258771465	0.023223367	0.254989726	-1.483094634	2003.576262	-0.178813108
13A	13.00728225	0.026014565	0.304661777	0.023711562	0.307230129	0.835969975	2006.626075	-0.331303744
15A	15.01121335	0.030022427	0.352178113	0.023454703	0.3508907	-0.366898507	2003.324458	-0.166222915
18A	18.01447835	0.036028957	0.422618801	0.023405898	0.420452204	-0.515301718	2003.414142	-0.170707082
21A	21.0411273	0.042082255	0.493460239	0.02341464	0.491477572	-0.403409418	2004.078353	-0.203917655
24A	24.0165927	0.048033185	0.56312969	0.023636594	0.566477613	0.591007081	2004.475837	-0.223791868
27A	26.8377671	0.026837767	0.629812645	4.51E-02	5.00E-02	-1159.039069	2002.778229	-0.138911446
30A	30.0203099	0.03002031	0.704330411	0.02341494	0.701730919	-0.37044005	2003.25663	-0.162831483
35A	35.0291918	0.035029192	0.821613082	0.023395021	0.81831583	-0.402931432	2003.828871	-0.191443556
40A	40.0323744	0.040032374	0.938662644	0.023420059	0.936367737	-0.245086032	2004.470519	-0.22352593
45A	45.003108	0.045003108	1.05507752	0.023431759	1.053309129	-0.167889039	2004.730492	-0.236524611
50A	50.0390381	0.050039038	1.17307822	0.023060793	1.152747048	-1.763714972	2004.840556	-0.242027795
60A	60.0838124	0.030041906	1.40471868	0.023308984	1.399299794	-0.387256945	2010.323649	-0.516182457
70A	70.1240328	0.035062016	1.63874602	0.023285056	1.631649171	-0.434949459	2011.18996	-0.559497975
80A	80.083287	0.040041644	1.87064781	0.022401264	1.792774018	-4.343759528	2012.091463	-0.604573156
90A	90.0287668	0.045014383	2.09343913	0.015458574	1.390523503	-50.55043119	2021.244362	-1.062218121
100A	100.0837292	0.050041865	2.24887451	0.022469931	2.247681662	-0.053070127	2091.684196	-4.584209823

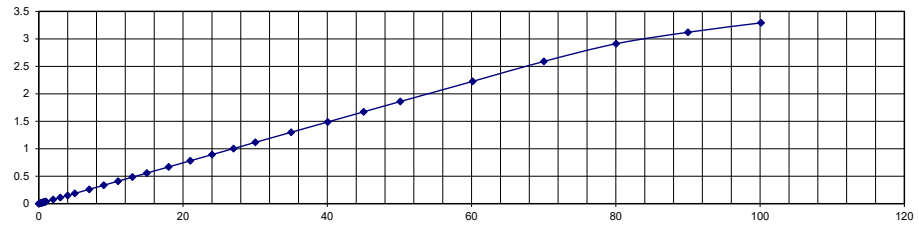
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	75
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001272002	0.001272002	4.93651E-05	0.037274361	-0.001224589	104.0311523	1932.544567	3.372771648
0.1A	0.100431505	0.100431505	0.003745472	0.03722516	0.002466577	-51.8490116	2011.058295	-0.552914734
0.2A	0.200506989	0.200506989	0.007470798	0.037196702	0.006186196	-20.76561197	2012.907338	-0.645366898
0.3A	0.300914057	0.300914057	0.01120561	0.037231284	0.009931408	-12.83001618	2014.040706	-0.70203531
0.4A	0.399778831	0.399778831	0.01488647	0.037248172	0.013619028	-9.306405665	2014.138457	-0.706922866
0.5A	0.50151154	0.50151154	0.018675828	0.037224468	0.017396498	-7.353949403	2014.013307	-0.700665331
0.6A	0.600774901	0.600774901	0.022370854	0.037219791	0.021088714	-6.079740806	2014.143876	-0.707193793
0.7A	0.700402982	0.700402982	0.02607899	0.037258097	0.02482368	-5.056904996	2014.273707	-0.71368533
0.8A	0.800440625	0.800440625	0.029806202	0.037203359	0.028507077	-4.557200509	2014.112589	-0.705629442
0.9A	0.900591271	0.900591271	0.033532143	0.037239627	0.032265681	-3.92510492	2014.316423	-0.715821133
1A	1.00389758	1.00389758	0.037379231	0.037251057	0.036124243	-3.474086748	2014.282175	-0.714108727
2A	2.0022122	2.0022122	0.074567505	0.037232595	0.073275553	-1.763142216	2013.825116	-0.691255793
3A	3.00252671	3.00252671	0.11181181	0.037180551	0.110363594	-1.312222553	2014.004632	-0.700231599
4A	4.00497378	0.040049738	0.149083344	0.037178462	0.147626761	-0.986665647	2014.79941	-0.739970489
5A	5.00539261	0.050053926	0.186277377	0.037181373	0.18483537	-0.780157751	2015.29811	-0.764905486
7A	7.01107078	0.035055354	0.260851246	0.037219421	0.259675996	-0.452583326	2015.824408	-0.791220392
9A	9.0098299	0.04504915	0.335243904	0.037064685	0.332674507	-0.772345718	2015.658553	-0.782927659
11A	11.00238245	0.022004765	0.409097237	0.037169071	0.407676331	-0.348537811	2017.072249	-0.853612432
13A	12.98733465	0.025974669	0.482876066	0.037108508	0.480668607	-0.459247696	2017.184465	-0.859232329
15A	14.9935095	0.029987019	0.557322221	0.037122615	0.555326275	-0.359418592	2017.707477	-0.885373858
18A	18.01258075	0.036025162	0.66939804	0.037149429	0.667885093	-0.226528016	2018.146866	-0.907343279
21A	21.0110021	0.042022004	0.780787682	0.037172326	0.779755808	-0.132332978	2018.250536	-0.912526787
24A	24.02142255	0.048042845	0.892692011	0.037102563	0.889984333	-0.304238894	2018.172751	-0.908637528
27A	27.0010345	0.027001035	1.00324325	0.037284971	1.005460794	0.220549985	2018.530987	-0.926549344
30A	30.0343851	0.030034385	1.11634164	0.036931547	1.107944306	-0.75792024	2017.822145	-0.891107247
35A	35.0006761	0.035000676	1.29975445	0.03705091	1.295534883	-0.325700752	2019.651256	-0.982562803
40A	40.069736	0.040069736	1.48756773	0.03699578	1.48113915	-0.434029474	2020.230837	-1.011541841
45A	45.0364281	0.045036428	1.67131438	0.036981482	1.664241863	-0.424969328	2021.003438	-1.050171886
50A	50.112375	0.050112375	1.85903042	0.036536537	1.829660666	-1.605202258	2021.714161	-1.085708027
60A	60.1604982	0.030080249	2.22615405	0.036842998	2.215221132	-0.493536196	2026.830697	-1.341534855
70A	70.0402256	0.035020113	2.59015283	0.032116571	2.248179846	-15.21110441	2028.072189	-1.403609454
80A	80.0306612	0.040015331	2.91101136	0.020980574	1.677817199	-73.49991179	2061.929291	-3.096464557
90A	90.0177474	0.045008874	3.12054616	0.016888231	1.518968506	-105.438503	2163.509434	-8.175471678
100A	100.1373384	0.050068669	3.29144815	0.032869339	3.290176148	-0.038660611	2281.761716	-14.08808582

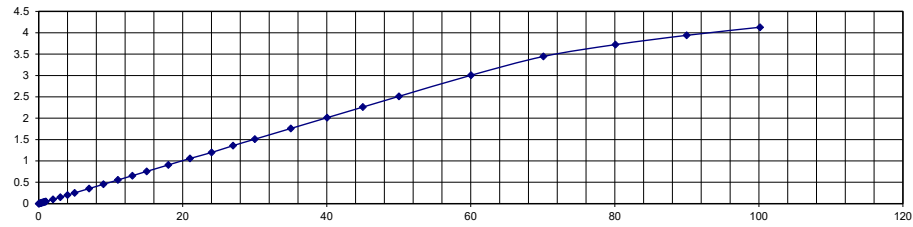
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	100
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001281061	0.001281061	6.38967E-05	0.050624595	-0.001216208	105.253765	2004.893846	-0.244692276
0.1A	0.100981495	0.100981495	0.005111191	0.050365077	0.00380488	-34.3325209	1975.694083	1.215295847
0.2A	0.199486539	0.199486539	0.010072405	0.050416955	0.008776443	-14.76637267	1980.525396	0.973730206
0.3A	0.300512686	0.300512686	0.015165836	0.050371032	0.013856073	-9.452625725	1981.51089	0.924455485
0.4A	0.400810955	0.400810955	0.020217963	0.050398912	0.018919375	-6.863799172	1982.44974	0.877512982
0.5A	0.50039938	0.50039938	0.025237111	0.050345094	0.023911593	-5.543414216	1982.791826	0.860408695
0.6A	0.600626455	0.600626455	0.030283053	0.050462179	0.029027858	-4.324102369	1983.374856	0.831257178
0.7A	0.700971383	0.700971383	0.035346677	0.05041115	0.034055712	-3.790742624	1983.132369	0.843381555
0.8A	0.801216302	0.801216302	0.040400138	0.050451742	0.039141697	-3.215091445	1983.201889	0.839905545
0.9A	0.899810163	0.899810163	0.04537437	0.050424787	0.044091674	-2.909156372	1983.08023	0.845988493
1A	1.00180385	1.00180385	0.05051738	0.050445668	0.049255604	-2.561691076	1983.087504	0.845624813
2A	2.00169442	2.00169442	0.100957528	0.050384283	0.099572877	-1.390590434	1982.709422	0.864528894
3A	3.00189603	3.00189603	0.151351969	0.050339773	0.149833703	-1.013300498	1983.387497	0.830625137
4A	4.0091026	0.040091026	0.202054519	0.050395344	0.200759045	-0.645288201	1984.168738	0.791563093
5A	5.00788657	0.050078866	0.252388581	0.050332928	0.250780533	-0.641217076	1984.196967	0.790151635
7A	7.0125103	0.035062552	0.353287163	0.050364131	0.351897929	-0.394783212	1984.932099	0.75339505
9A	8.9997146	0.044999857	0.453383918	0.050185955	0.4503911	-0.66449305	1985.066321	0.746683962
11A	11.016009	0.022032018	0.554560687	0.05024905	0.552262921	-0.416063745	1986.438862	0.678056899
13A	13.0140249	0.02602805	0.654959087	0.050294888	0.653257858	-0.260422315	1986.998144	0.65009282
15A	15.0029051	0.03000581	0.754989593	0.050338888	0.753948505	-0.138084699	1987.16714	0.641643017
18A	18.01649095	0.036032982	0.906690155	0.050307893	0.905090647	-0.176723548	1987.061495	0.646925244
21A	21.00780135	0.042015603	1.05717668	0.046861097	0.983167556	-7.527620684	1987.160874	0.641956319
24A	24.02169665	0.048043393	1.19841112	0.053574017	1.285657717	6.786145018	2004.462096	-0.223104781
27A	27.0040295	0.02700403	1.35818667	0.050136109	1.352595909	-0.413335647	1988.241388	0.587930597
30A	30.0160243	0.030016024	1.50919637	0.050134467	1.503556313	-0.375114482	1988.874668	0.556266578
35A	35.003315	0.035003315	1.75923153	0.050112042	1.752806524	-0.366555329	1989.693477	0.515326144
40A	40.0448697	0.04004487	2.01187413	0.050054458	2.003143205	-0.435861265	1990.426195	0.478690235
45A	45.0133382	0.045013338	2.26056813	0.050050226	2.251646681	-0.396218881	1991.240061	0.437996974
50A	50.0316734	0.050031673	2.51173694	0.049302433	2.465402162	-1.879400412	1991.91534	0.404233017
60A	60.0337512	0.030016876	3.00486371	0.04379961	2.628173824	-14.33276149	1997.885994	0.105700301
70A	70.0775064	0.035038753	3.44477627	0.027760378	1.944097009	-77.19158324	2034.312272	-1.715613595
80A	80.0829602	0.04004148	3.72253145	0.021956702	1.757076649	-111.859366	2151.303791	-7.565189543
90A	89.9818338	0.044990917	3.93987807	0.018605219	1.672850678	-135.5188136	2283.873567	-14.19367833
100A	100.1761738	0.050088087	4.129546	0.041222836	4.128264939	-0.031031465	2425.839882	-21.29199408

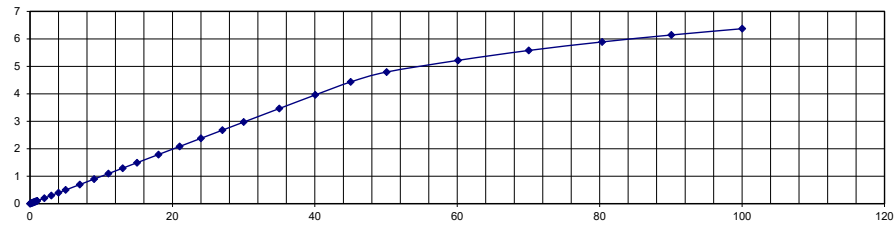
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	200
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001287739	0.001287739	0.000118039	0.099834539	-0.001159179	110.1829686	2181.891982	-9.094599095
0.1A	0.100960646	0.100960646	0.010068838	0.099419679	0.008749736	-15.07590629	2005.408191	-0.270409568
0.2A	0.201391836	0.201391836	0.020053674	0.099703377	0.018791707	-6.715555218	2008.528053	-0.426402659
0.3A	0.301183636	0.301183636	0.030003254	0.099391062	0.028647222	-4.733553539	2007.673161	-0.383658056
0.4A	0.400293476	0.400293476	0.039853886	0.099546636	0.038560129	-3.355166402	2008.805244	-0.440262212
0.5A	0.500931607	0.500931607	0.049872073	0.099508494	0.04855921	-2.703633657	2008.866176	-0.44330882
0.6A	0.601384671	0.601384671	0.059868007	0.099286747	0.058421788	-2.475477543	2009.03523	-0.451761493
0.7A	0.699896095	0.699896095	0.069558534	0.099840766	0.068499567	-1.545946949	2009.778098	-0.488904924
0.8A	0.801310126	0.801310126	0.079774644	0.099541526	0.078475893	-1.654967846	2008.934383	-0.446719135
0.9A	0.901880916	0.901880916	0.089785614	0.099502585	0.088451743	-1.508021084	2008.965305	-0.448265243
1A	1.00231937	1.00231937	0.0997795	0.09952652	0.098469619	-1.330238186	2009.068743	-0.45343713
2A	2.00879605	2.00879605	0.199950621	0.099396425	0.198379407	-0.792024525	2009.292134	-0.464606709
3A	3.00166602	3.00166602	0.298638347	0.099278149	0.296712106	-0.649195371	2010.234821	-0.511741046
4A	4.00594753	0.040059475	0.398341556	0.099506417	0.397329746	-0.254652572	2011.312889	-0.565644474
5A	5.01851262	0.050185126	0.49909828	0.099326086	0.497181476	-0.385534099	2011.031823	-0.551591162
7A	7.00516034	0.035025802	0.696424222	0.099386772	0.694932531	-0.21465265	2011.750918	-0.587545905
9A	8.99824628	0.044991231	0.894510599	0.098748414	0.887274808	-0.815507316	2011.881422	-0.594071105
11A	11.01225545	0.022024511	1.09339081	0.099149287	1.090569535	-0.258697384	2014.331079	-0.716553947
13A	13.01449325	0.026028987	1.29191126	0.098962015	1.286652735	-0.40869811	2014.765821	-0.738291034
15A	15.0277542	0.030055508	1.49114762	0.098848153	1.484178013	-0.469593743	2015.595773	-0.779788657
18A	18.03941825	0.036078837	1.78884505	0.098764579	1.780367814	-0.476150806	2016.878796	-0.843939781
21A	21.0113815	0.042022763	2.08236975	0.098684403	2.072207904	-0.490387371	2018.026001	-0.901300069
24A	24.0128558	0.048025712	2.37856845	0.098892076	2.373393431	-0.218043025	2019.101515	-0.955075731
27A	27.0117359	0.027011736	2.67513393	0.098568681	2.661223439	-0.522710376	2019.46793	-0.973396498
30A	30.0164888	0.030016489	2.97130846	0.098549162	2.956812089	-0.490270299	2020.422262	-1.021113102
35A	35.00398	0.03500398	3.46282154	0.098142197	3.434079753	-0.836957462	2021.702799	-1.085139952
40A	40.0628419	0.040062842	3.95930936	0.095047031	3.806566445	-4.012616533	2023.7288	-1.186440001
45A	45.0364953	0.045036495	4.43204035	0.071598422	3.223254242	-37.5020404	2032.314318	-1.615715886
50A	50.0803164	0.050080316	4.79316998	0.042279814	2.116098731	-126.5097516	2089.653261	-4.482663058
60A	60.1031684	0.030051584	5.21693343	0.036342438	2.183007908	-138.9791755	2304.156616	-15.20783078
70A	70.0320976	0.035016049	5.57777579	0.030155444	2.110561226	-164.2792695	2511.111964	-25.55559821
80A	80.3508926	0.040175446	5.88894363	0.025983295	2.08649322	-182.2412062	2728.872873	-36.44364363
90A	90.0587152	0.045029358	6.14118485	0.022979077	2.068178436	-196.936896	2932.942662	-46.64713309
100A	100.0177674	0.050008884	6.37003468	0.063689031	6.368746941	-0.020219668	3140.258175	-57.01290876

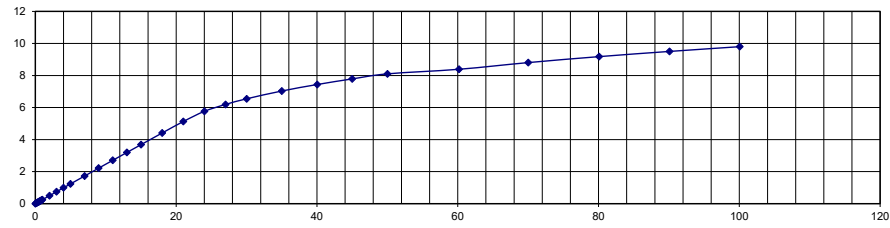
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	500
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001241423	0.001241423	0.000278001	0.248023393	-0.000933521	129.7797943	2232.769961	-11.63849807
0.1A	0.100523002	0.100523002	0.024902155	0.247793327	0.023667506	-5.216640833	2018.35952	-0.917975985
0.2A	0.200525828	0.200525828	0.049682188	0.247751356	0.048439123	-2.566242015	2018.085729	-0.904286467
0.3A	0.301075716	0.301075716	0.074593559	0.247667943	0.07332538	-1.729522155	2018.108003	-0.905400159
0.4A	0.402541426	0.402541426	0.099723363	0.247493319	0.09838489	-1.360444784	2018.290478	-0.914523916
0.5A	0.500991633	0.500991633	0.124089131	0.247481471	0.122744723	-1.095287641	2018.676531	-0.933826549
0.6A	0.601196367	0.601196367	0.148887946	0.247505041	0.147557708	-0.901503381	2018.955809	-0.947790461
0.7A	0.700711932	0.700711932	0.17351855	0.247404707	0.172118007	-0.813710888	2019.126866	-0.956343284
0.8A	0.801694077	0.801694077	0.198502008	0.247860174	0.197466611	-0.524340537	2019.360119	-0.968005951
0.9A	0.900527131	0.900527131	0.222998786	0.247344981	0.221499443	-0.676906076	2019.13012	-0.956505992
1A	1.00314532	1.00314532	0.24838088	0.247523299	0.247060416	-0.534470113	2019.369043	-0.968452161
2A	2.00931387	2.00931387	0.497431039	0.247207548	0.495476131	-0.394551428	2019.690884	-0.984544211
3A	3.00148278	3.00148278	0.742702682	0.24672089	0.739287079	-0.462013029	2020.648944	-1.032447194
4A	4.01035605	0.040103561	0.991612793	0.246688127	0.988065798	-0.35898365	2022.138116	-1.106905798
5A	5.00396231	0.050039623	1.23672366	0.245525835	1.227360603	-0.762861169	2023.072119	-1.153605932
7A	7.00177822	0.035008891	1.72723908	0.245869236	1.720280435	-0.404506439	2026.870021	-1.34350104
9A	8.9992644	0.044996322	2.21835948	0.243882622	2.193522777	-1.132274657	2028.360255	-1.418012738
11A	11.0039281	0.022007856	2.70726212	0.243778193	2.681276284	-0.969159224	2032.298243	-1.614912153
13A	13.00881145	0.026017623	3.19600896	0.243480232	3.166147011	-0.943163703	2035.165047	-1.758252345
15A	15.00801765	0.030016035	3.68277615	0.242362548	3.636139981	-1.282573521	2037.595694	-1.879784697
18A	18.0205798	0.03604116	4.41290839	0.238611881	4.29868302	-2.657217793	2041.80307	-2.090153519
21A	21.0117744	0.042023549	5.12664296	0.212198571	4.457427074	-15.01350161	2049.272259	-2.463612953
24A	24.01868075	0.048037362	5.76470419	0.142666058	3.42540908	-68.29243035	2083.253534	-4.162676689
27A	27.0244746	0.027024475	6.19352895	0.117767521	3.181363953	-94.68155928	2181.670161	-9.083508038
30A	30.014804	0.030014804	6.54569263	0.09719546	2.916061258	-124.4703403	2292.714133	-14.63570663
35A	35.0173677	0.035017368	7.03191911	0.080599187	2.821129957	-149.2589571	2489.886982	-24.4943491
40A	40.057554	0.040057554	7.43815403	0.070287493	2.814303611	-164.2982087	2692.708019	-34.63540093
45A	45.0047962	0.045004796	7.78588328	0.063014519	2.834714177	-174.6620221	2890.153537	-44.50767685
50A	50.0212404	0.05002124	8.1019921	0.028206562	1.409685781	-474.7374493	3086.971684	-54.34858422
60A	60.186228	0.030093114	8.38871145	0.042346432	2.547430571	-229.3008863	3587.334501	-79.36672503
70A	70.0308034	0.035015402	8.80559409	0.036993809	2.589464746	-240.0546041	3976.495094	-98.82475471
80A	80.0827118	0.040041356	9.17745247	0.032421266	2.595141439	-253.6397798	4363.014249	-118.1507125
90A	90.095973	0.045047987	9.50209507	0.029783657	2.682146135	-254.2720863	4740.847799	-137.04239
100A	100.0590138	0.050029507	9.79883086	0.097930516	9.797589437	-0.012670701	5105.66083	-155.2830415

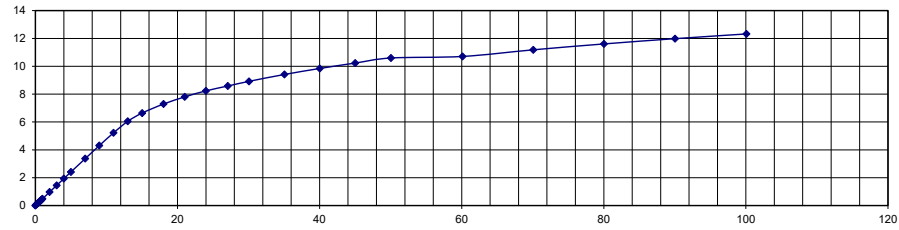
CURRENT TRANSFORMER CHARACTERISTICS TEST

CT PRIMARY CURRENT VERSUS SECONDARY VOLTAGE

PRODUCT:	CR8449-2000-F
Lot #:	235509
TURNS/RATIO:	2000
DATE:	July 22, 2020
TESTER:	lb

TEST SETUP

FULL SCALE PRIMARY CURRENT(Amps):	75
Burden (Ohms):	1000
MEASUREMENT CT TURNS RATIO:	2000
FREQUENCY(Hz):	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	0.001175169	0.001175169	0.000523234	0.485046944	-0.000605157	186.4624741	2245.973884	-12.29869419
0.1A	0.099973109	0.099973109	0.048444873	0.484734875	0.047285283	-2.45232578	2063.64686	-3.182342982
0.2A	0.201258454	0.201258454	0.097541412	0.486651329	0.096767525	-0.799737782	2063.312914	-3.165645701
0.3A	0.301027752	0.301027752	0.146094273	0.481360478	0.143727694	-1.646571614	2060.503439	-3.025171972
0.4A	0.400587872	0.400587872	0.19401858	0.485299254	0.193229826	-0.408194523	2064.688196	-3.234409818
0.5A	0.501706212	0.501706212	0.243091235	0.48443493	0.241868845	-0.505393915	2063.859736	-3.192986781
0.6A	0.601006087	0.601006087	0.291195563	0.484787994	0.290185366	-0.34812128	2063.925977	-3.196298874
0.7A	0.701069844	0.701069844	0.339705271	0.484494095	0.33848903	-0.359314624	2063.759099	-3.187954949
0.8A	0.800398035	0.800398035	0.387829193	0.484263257	0.38642819	-0.362551873	2063.790064	-3.189503195
0.9A	0.900559423	0.900559423	0.436333673	0.484819087	0.435433228	-0.20679283	2063.923733	-3.196186626
1A	1.00125709	1.00125709	0.485153824	0.484595892	0.484029904	-0.232200545	2063.79305	-3.189652484
2A	2.00085612	2.00085612	0.969555408	0.482683388	0.964604842	-0.513222202	2063.684142	-3.184207086
3A	3.00241653	3.00241653	1.45299198	0.480410653	1.441217716	-0.816966387	2066.368274	-3.318413705
4A	4.00511201	0.04005112	1.93469757	0.47955826	1.919509377	-0.791253936	2070.148881	-3.50744406
5A	5.00324792	0.050032479	2.41336189	0.476244829	2.381595781	-1.333816144	2073.144496	-3.657224818
7A	7.00855868	0.035042793	3.36838077	0.471186378	3.301162209	-2.036208974	2080.690741	-4.034537046
9A	9.0047926	0.045023963	4.308979	0.457686777	4.120199336	-4.581809011	2089.774074	-4.488703705
11A	11.00368655	0.022007373	5.22384633	0.412564554	4.538555864	-15.09930663	2106.433814	-5.321690713
13A	13.00759295	0.026015186	6.05058708	0.293093308	3.811263276	-58.75542155	2149.806751	-7.490337533
15A	15.02757585	0.030055152	6.64263055	0.215168214	3.232281494	-105.5090363	2262.292888	-13.11464439
18A	18.04419855	0.036088397	7.29171187	0.171243473	3.088776066	-136.0712371	2474.617603	-23.73088015
21A	21.02367105	0.042047342	7.80192709	0.145587058	3.059599244	-154.9983337	2694.676688	-34.73383439
24A	24.0103899	0.04802078	8.2367547	0.11284514	2.708280641	-204.1322445	2915.030346	-45.75151728
27A	27.0876012	0.027087601	8.58400304	0.112578038	3.048293838	-181.6002491	3155.590821	-57.77954105
30A	30.0659122	0.030065912	8.91929545	0.098775954	2.968614	-200.4531896	3370.88421	-68.54421052
35A	35.0536263	0.035053626	9.41196167	0.08665344	3.036342132	-209.9769808	3724.369853	-86.21849264
40A	40.0300172	0.040030017	9.84318306	0.078055953	3.123405976	-215.1426083	4066.775651	-103.3387826
45A	45.0281682	0.045028168	10.2333185	0.071931913	3.237787089	-216.059031	4400.153108	-120.0076554
50A	50.0484073	0.050048407	10.5944339	0.011105562	0.554640514	-1810.144251	4724.028464	-136.2014232
60A	60.1244486	0.030062224	10.706334	0.047828621	2.874494309	-272.459739	5615.783012	-180.7891506
70A	70.0733116	0.035036656	11.1821744	0.042478224	2.975414643	-275.8190284	6266.519292	-213.3259646
80A	80.027499	0.04001375	11.6050106	0.03779932	3.023809902	-283.7877042	6895.943637	-244.7971818
90A	90.0297344	0.045014867	11.9830883	0.033783144	3.040312309	-294.140045	7513.066093	-275.6533047
100A	100.0789116	0.050039456	12.3225811	0.123128648	12.32140593	-0.009537622	8121.586767	-306.0793384