



Downloadable Dynamometer Database (D³)- Test Summary Sheet

2012 Chevrolet Volt- 20F	
Vehicle architecture	EREV
Document date	10/22/2012
Revision Number	1
Notes:	

Vehicle Setup Information	
Test cell location	Front
Vehicle dynamometer input	
Test weight [lb]	4000
Target A [lb]	28.66
Target B [lb/mph]	-0.0132
Target C [lb/mph ²]	0.0202
Test Fuel Information	
Fuel type	EPA Tier II EEE
Fuel density [g/ml]	0.743
Fuel Net HV [BTU/lbm]	18490

Test ID [Ref]	Cycle	Cold start (Cst) High start [Hst]	Date	Test Cell Temp [C]	Test Cell RH [%]	Test Cell Baoro [ppmHg]	Vehicle cooling fan speed, Speed Match [SM] or constant speed [CS]	Solar Lamps [W/m ²]	Vehicle Climate Control settings	Hood Position [Up] or [Closed]	Window Position [Closed] or [Down]	Cycle Fuel economy [mpg]	Cycle Fuel economy [mpg] (Emiss Bag)	Cycle HV battery Integrated net current [DC Ah]	Cycle HV battery Average Zero crossing Voltage [V]	Cycle HV battery Net Energy [DC Wh]	Cycle HV battery Net Energy Consumption [DC Wh/mi]			
Test information		Test cell information			Test Cell setup		Vehicle setup					Electric energy consumption								
Test sequence purpose: Standard testing																				
61209068	UDDS CS	Cst	09/25/12	-6.87	28.71	29.17	SM	Off	72F	Closed	Closed	7.45	96.3	0.08	8.40	379.7	3093.2	414.9		
61209069	UDDS HS- Cycle 1	Hst	09/25/12	-6.63	28.93	29.18	SM	Off	72F	Closed	Closed	7.45	269.0	0.03	8.80	367.7	3144.5	422.1		
61209070	UDDS HS- Cycle 2	Hst	09/25/12	-6.61	29.21	29.18	SM	Off	72F	Closed	Closed	7.45	253.9	0.03	8.48	357.4	2945.5	395.5		
61209071	UDDS HS- Cycle 3	Hst	09/25/12	-6.95	30.58	29.17	SM	Off	72F	Closed	Closed	7.44	44.0	0.17	1.58	350.1	488.1	65.6		
61209072	UDDS HS- Cycle 4	Hst	09/25/12	-6.70	31.36	29.16	SM	Off	72F	Closed	Closed	7.46	38.1	0.20	0.16	349.1	-12.3	-1.6		
61209073	UDDS HS- Cycle 5	Hst	09/25/12	-6.68	31.34	29.15	SM	Off	72F	Closed	Closed	7.46	38.3	0.19	0.01	349.3	-58.9	-7.9		
Full charge test summary												Totals	44.72	0.69	27.4	9600				
Re-charging information		N/A Ambient temperature during charge			HV battery integrated current [DC Ah] at [DC Ah]		27.3		Charger integrated current [AC Ah] at [AC Ah]		59.5		HV battery integrated power [DC Wh]		N/A		Charger integrated power [AC Wh]		11885	
61205066a	Highway- Cycle 1	Cst	05/18/12	-6.36	14.40	29.36	SM	Off	72F	Closed	Closed	10.25	128.9	0.08	9.85	379.5	3562.2	347.5		
61205066b	Highway- Cycle 2	Hst	05/18/12	-6.36	14.40	29.36	SM	Off	72F	Closed	Closed	10.26	Inf		10.54	361.1	3723.6	362.9		
61205067a	Highway- Cycle 3	Hst	05/18/12	-6.31	15.08	29.36	SM	Off	72F	Closed	Closed	10.25	76.9	0.13	5.49	355.7	1879.9	183.4		
61205067b	Highway- Cycle 4	Hst	05/18/12	-6.31	15.08	29.36	SM	Off	72F	Closed	Closed	10.25	43.2	0.24	-0.20	355.3	-106.7	-10.4		
61205068a	Highway- Cycle 5	Hst	05/18/12	-7.65	17.29	29.35	SM	Off	72F	Closed	Closed	10.25	44.5	0.23	0.20	355.6	30.2	2.9		
61205068b	Highway- Cycle 6	Hst	05/18/12	-7.65	17.29	29.35	SM	Off	72F	Closed	Closed	10.25	46.5	0.22	0.31	355.4	69.4	6.8		
Full charge test summary												Totals	61.51	0.90	26.2	9158				
61205105a	US06- Cycle 1	Cst	05/31/12	-6.41	14.24	29.27	SM	Off	72F	Closed	Closed	8.02	141.7	0.08	9.44	375.3	3370.2	420.2		
61205105b	US06- Cycle 2	Hst	05/31/12	-6.41	14.24	29.27	SM	Off	72F	Closed	Closed	8.02	Inf		10.16	361.3	3541.5	441.8		
61205106a	US06- Cycle 3	Hst	05/31/12	-6.58	13.73	29.25	SM	Off	72F	Closed	Closed	8.02	Inf		8.44	353.0	2864.5	357.2		
61205106b	US06- Cycle 4	Hst	05/31/12	-6.58	13.73	29.25	SM	Off	72F	Closed	Closed	8.02	30.8	0.27	-0.29	350.8	-161.7	-20.2		
61205107a	US06- Cycle 5	Hst	05/31/12	-7.77	16.46	29.24	SM	Off	72F	Closed	Closed	8.03	30.8	0.26	-0.01	351.7	-68.9	-8.6		
61205107b	US06- Cycle 6	Hst	05/31/12	-7.77	16.46	29.24	SM	Off	72F	Closed	Closed	8.02	32.6	0.25	-0.10	352.0	-96.8	-12.1		
Full charge test summary												Totals	48.13	0.86	27.6	9449				
Re-charging information		N/A Ambient temperature during charge			HV battery integrated current [DC Ah] at [DC Ah]		27.75		Charger integrated current [AC Ah] at [AC Ah]		59.15		HV battery integrated power [DC Wh]		N/A		Charger integrated power [AC Wh]		11987	

Summary notes
 For the highway and US06 cycles in this summary, two test cycles were conducted in succession. The first is labeled as "a" the second as "b"
 Electric energy consumption:
 HV battery Integrated net current --> Integrated current as reported by power analyzer
 HV battery Average Zero crossing Voltage --> Calculated average zero crossing voltage over the phase or cycle
 HV Net Energy --> Integrated power as reported by power analyzer
 Note that HV Net Energy is not equal to the product of HV battery Integrated net current times Average Zero crossing Voltage.
 * The vehicle coast down information for EPA

Advanced Powertrain Research Facility Data referencing:
 - This data has originated from the Argonne National Laboratory D³ website. http://webapps.anl.gov/vehicle_data/
 - The purpose of this information is to provide advanced technology vehicle chassis dynamometer test data for the engineering community. Mostly comprised of vehicle benchmarking test results, it is intended for the better understanding of the technology and for education. Data from this website may not be used as a source for publication or profit without consent of Argonne National Laboratory.
 - Please contact d3info@anl.gov for questions, comments or inquiries.