



Downloadable Dynamometer Database (D³)- Test Summary Sheet

2012 Chevrolet Volt- 95F

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|----------------------|------------|
| 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 [Id] | Cycle | Cold start (Csb) High start [Hb] | Date | Test Cell Temp [C] | Test Cell RH [%] | Test Cell Baro [in/Hg] | Vehicle cooling fan speed: Speed Match [RPM] 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 | | | | | | | | | | | | | | | | | | | | |
| 61209074 | UDDS CS | 09/27/12 | 36.21 | 33.63 | 29.46 | SM | 850 | 72F | Closed | Closed | 7.45 | Inf | 5.90 | 385.6 | 2231.9 | 299.5 | | | | |
| 61209075 | UDDS HS- Cycle 1 | 09/27/12 | 35.74 | 35.73 | 29.46 | SM | 850 | 72F | Closed | Closed | 7.45 | Inf | 5.82 | 377.2 | 2158.9 | 289.9 | | | | |
| 61209076 | UDDS HS- Cycle 2 | 09/27/12 | 35.75 | 37.44 | 29.47 | SM | 850 | 72F | Closed | Closed | 7.47 | Inf | 6.07 | 370.7 | 2207.6 | 295.5 | | | | |
| 61209077 | UDDS HS- Cycle 3 | 09/27/12 | 35.74 | 38.15 | 29.46 | SM | 850 | 72F | Closed | Closed | 7.47 | Inf | 6.08 | 363.0 | 2165.4 | 290.1 | | | | |
| 61209078 | UDDS HS- Cycle 4 | 09/27/12 | 35.89 | 38.11 | 29.47 | SM | 850 | 72F | Closed | Closed | 7.47 | 99.1 | 4.46 | 350.9 | 1527.1 | 204.3 | | | | |
| 61209079 | UDDS HS- Cycle 5 | 09/27/12 | 36.03 | 36.60 | 29.46 | SM | 850 | 72F | Closed | Closed | 7.45 | 29.3 | 0.25 | 0.07 | 348.9 | -22.9 | -3.1 | | | |
| 61209080 | UDDS HS- Cycle 6 | 09/27/12 | 36.04 | 37.55 | 29.45 | SM | 850 | 72F | Closed | Closed | 7.48 | 27.6 | 0.27 | 0.06 | 348.7 | -27.9 | -3.7 | | | |
| Full charge test summary | | | | | | | | | | | | Totals | 52.24 | 0.60 | 28.46 | 10240 | | | | |
| Re-charging information | | N/A Ambient temperature during charge | | | | | | HV battery integrated current [DC Ah] nt [DC Ah] | | | 28.19 | | | | | | | | | |
| Level: | | | | | | | | Charger integrated current [AC Ah] nt [AC Ah] | | | 70.33 | | | | | | | | | |
| | | | | | | | | | | | | HV battery integrated power [DC Wh] | | | N/A | | | | | |
| | | | | | | | | | | | | Charger integrated power [AC Wh] | | | 14146 | | | | | |
| 61205084a | Highway- Cycle 1 | 05/23/12 | 34.52 | 41.66 | 29.19 | SM | 850 | 72F | Closed | Closed | 10.26 | Inf | 7.82 | 383.2 | 2964.5 | 288.9 | | | | |
| 61205084b | Highway- Cycle 2 | 05/23/12 | 34.52 | 41.66 | 29.19 | SM | 850 | 72F | Closed | Closed | 10.25 | Inf | 7.08 | 374.0 | 2611.5 | 254.7 | | | | |
| 61205085a | Highway- Cycle 3 | 05/23/12 | 33.41 | 44.49 | 29.18 | SM | 850 | 72F | Closed | Closed | 10.26 | Inf | 7.65 | 365.6 | 2762.8 | 269.4 | | | | |
| 61205085b | Highway- Cycle 4 | 05/23/12 | 33.41 | 44.49 | 29.18 | SM | 850 | 72F | Closed | Closed | 10.26 | 95.4 | 4.06 | 356.1 | 1416.2 | 138.0 | | | | |
| 61205086a | Highway- Cycle 5 | 05/23/12 | 33.40 | 41.65 | 29.17 | SM | 850 | 72F | Closed | Closed | 10.26 | 39.4 | 0.26 | -0.08 | 356.0 | -52.4 | -5.1 | | | |
| 61205086b | Highway- Cycle 6 | 05/23/12 | 33.40 | 41.65 | 29.17 | SM | 850 | 72F | Closed | Closed | 10.27 | 42.6 | 0.24 | 0.25 | 355.6 | 61.8 | 6.0 | | | |
| Full charge test summary | | | | | | | | | | | | Totals | 61.56 | 0.61 | 26.79 | 9764 | | | | |
| 61206001a | US06- Cycle 1 | 06/01/12 | 35.59 | 39.55 | 29.02 | SM | 850 | 72F | Closed | Closed | 8.01 | Inf | 8.01 | 380.8 | 2975.9 | 371.3 | | | | |
| 61206001b | US06- Cycle 2 | 06/01/12 | 35.59 | 39.55 | 29.02 | SM | 850 | 72F | Closed | Closed | 8.02 | Inf | 7.84 | 370.6 | 2833.4 | 353.2 | | | | |
| 61206002a | US06- Cycle 3 | 06/01/12 | 35.58 | 44.30 | 29.01 | SM | 850 | 72F | Closed | Closed | 8.02 | Inf | 8.61 | 360.2 | 3026.8 | 377.5 | | | | |
| 61206002b | US06- Cycle 4 | 06/01/12 | 35.58 | 44.30 | 29.01 | SM | 850 | 72F | Closed | Closed | 8.02 | 44.6 | 0.19 | 2.30 | 352.1 | 744.3 | 92.8 | | | |
| 61206003a | US06- Cycle 5 | 06/01/12 | 36.36 | 43.37 | 29.04 | SM | 850 | 72F | Closed | Closed | 8.01 | 26.7 | 0.30 | 0.31 | 351.9 | 55.3 | 6.9 | | | |
| 61206003b | US06- Cycle 6 | 06/01/12 | 36.36 | 43.37 | 29.04 | SM | 850 | 72F | Closed | Closed | 8.02 | 22.8 | 0.30 | -0.43 | 352.5 | -205.7 | -25.6 | | | |
| Full charge test summary | | | | | | | | | | | | Totals | 48.11 | 0.79 | 26.64 | 9430 | | | | |

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.