



Downloadable Dynamometer Database (D³)- Test Summary Sheet

2012 Mitsubishi I-MiEV	
Vehicle Architecture	Electric
Document Date	5/29/2014
Revision Number	1
Notes:	

Vehicle Setup Information	
Test Cell Location	APRF- Bldg 371
Vehicle Dynamometer Input	
Test weight [lb]	2875
Target A [lb]	21.30
Target B [lb/mph]	0.59605
Target C [lb/mph^2]	0.012871
Test Fuel Information	
Fuel type	Electricity
Fuel density [g/ml]	-
Fuel Net HV [BTU/lbm]	-

Test ID [#]	Cycle	Cold start (CS) Hot start [HSt]	Date	Test Cell Temp [C]	Test Cell RH [%]	Test Cell Baro [in/Hg]	Vehicle cooling fan speed: Speed Match [SM] or constant speed [CS]	Solar Lamps [W/m2]	Veicle Climate Control settings	Hood Position [Up] or [Closed]	Window Position [Closed] or [Down]	Cycle Distance [mi]	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	
Test information				Test cell information			Test cell setup		Vehicle setup				Electric energy consumption					
Test sequence purpose: AVTE Standard Testing																		
61402053	UDDS #1	CS	02/20/14	-7	17.1	28.9	SM	0	72	Closed	Closed	7.44	-	4.470	347.3	2806.70	377.11	
61402054	HWY #1	HS	02/20/14	-7	16.3	28.9	SM	0	72	Closed	Closed	10.25	-	6.884	335.5	3001.50	292.90	
61402055	UDDS #2	HS	02/20/14	-8	18.5	28.9	SM	0	72	Closed	Closed	7.48	-	4.420	334.2	2655.10	354.85	
61402056	US06 #1	HS	02/20/14	-7	15.3	28.9	SM	0	72	Closed	Closed	8.02	-	7.878	317.0	3003.87	374.55	
61402057	US06 #2	HS	02/20/14	-7	19.6	28.9	SM	0	72	Closed	Closed	5.46	-	5.456	294.9	1703.66	311.89	
Full charge test summary												Totals	38.65		29.1		13171	
Re-charging information				-7	Ambient temperature during charge [C]				Charger integrated current [AC Ah]				71.57					
Level: 2								Charger integrated power [AC Wh]				17083						
61402034	UDDS #1	CS	02/18/14	22	41.5	29.2	SM	0	OFF	Closed	Down	7.45	-	3.644	357.9	1289.36	173.09	
61402035	HWY #1	HS	02/18/14	21	32.9	29.2	SM	0	OFF	Closed	Down	10.25	-	5.807	353.0	2030.08	198.12	
61402036	UDDS #2	HS	02/18/14	22	48.0	29.2	SM	0	OFF	Closed	Down	7.44	-	3.586	351.0	1243.65	167.10	
61402037	US06 #1	HS	02/18/14	21	33.1	29.2	SM	0	OFF	Closed	Down	8.03	-	6.647	342.5	2232.59	278.17	
61402038	US06 #2	HS	02/18/14	23	35.3	29.2	SM	0	OFF	Closed	Down	8.02	-	6.714	332.9	2219.84	276.79	
61402039	UDDS #3	HS	02/18/14	23	46.1	29.2	SM	0	OFF	Closed	Down	7.49	-	3.750	337.2	1249.73	166.83	
61402040	HWY #2	HS	02/18/14	21	33.5	29.2	SM	1	OFF	Closed	Down	10.26	-	6.158	329.1	2009.05	195.75	
61402041	UDDS #4	HS	02/18/14	22	44.8	29.1	SM	2	OFF	Closed	Down	7.49	-	3.929	320.5	1244.21	166.16	
61402042	Steady State Deplete	HS	02/18/14	21	0.0	0.0	SM	3	OFF	Closed	Down	2.06	-	1.630	251.1	502.90	243.89	
Full charge test summary												Totals	68.49		41.9		14021	
Re-charging information				23	Ambient temperature during charge [C]				Charger integrated current [AC Ah]				72.04					
Level: 2								Charger integrated power [AC Wh]				17199						
61402028	Steady State Speed- 0% Grade	HS	02/17/14	24	38.5	29.0	SM	4	OFF	Closed	Down	6.22	-	4.079	351.7	1407.18	226.17	
61402030	Passing Manuevers- 0% Grade	HS	02/17/14	25	42.0	29.0	SM	5	OFF	Closed	Down	3.31	-	2.613	337.7	852.89	257.94	
61402032	WOTs	HS	02/17/14	25	40.5	29.0	SM	6	OFF	Closed	Down	4.26	-	4.918	327.5	1539.81	361.52	
61402045	UDDS #1	CS	02/19/14	36	39.5	29.2	SM	850	72	Closed	Closed	7.46	-	3.402	357.8	1600.17	214.63	
61402046	HWY #1	HS	02/19/14	35	29.6	29.2	SM	850	72	Closed	Closed	10.26	-	5.541	352.9	2121.65	206.88	
61402047	UDDS #2	HS	02/19/14	34	49.6	29.2	SM	850	72	Closed	Closed	7.47	-	3.433	349.1	1415.55	189.42	
61402048	US06 #1	HS	02/19/14	36	29.6	29.2	SM	850	72	Closed	Closed	8.01	-	6.420	338.2	2282.29	284.94	
61402049	US06 #2	HS	02/19/14	34	35.1	29.2	SM	850	72	Closed	Closed	8.00	-	6.472	331.4	2260.91	282.54	
61402050	SC03 #2	HS	02/19/14	35	42.9	29.2	SM	850	72	Closed	Closed	3.59	-	1.862	332.4	749.66	208.87	
61402051	HWY #2	HS	02/19/14	34	31.3	29.2	SM	850	72	Closed	Closed	10.26	-	6.005	323.2	2031.81	198.01	
61402052	UDDS #4	HS	02/19/14	34	46.3	29.2	SM	850	72	Closed	Closed	3.74	-	2.167	285.2	669.52	179.13	
Full charge test summary												Totals	62.38		37.2		13755	
Re-charging information				35 to -7	Ambient temperature during charge [C]				Charger integrated current [AC Ah]				70.92					
Level: 2								Charger integrated power [AC Wh]				16847						

Summary notes

For 95F (35C) testing, only the second (prepped) SC03 phase test results are presented in this summary, though the first SC03 is included for the full charge tests total. Testing was conducted using a modified SAE J1634 Multi Cycle Test Methodology.

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.

* Target Coefficients developed during AVTE coast down testing

Advanced Powertrain Research Facility Data referencing:

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