



Downloadable Dynamometer Database (D³)- Test Summary Sheet

2014 BMW i3 BEV	
Vehicle architecture	Electric Vehicle
Document date	9/2/2015
Revision Number	1
Notes:	

Vehicle Setup Information	
Test cell location	ANL APRF Bdg 371
Vehicle dynamometer Input	
Test weight [lb]	3182
Target A [lb]	23.6
Target B [lb/mph]	0.6633
Target C [lb/mph ²]	0.0117
Test Fuel Information	
Fuel type	Electricity
Fuel density [g/ml]	-
Fuel Net HV [BTU/lbm]	-

Test ID [H]	Cycle	Cold start (CS) / Hot start [HS]	Date	Average Test Cell Temp [C]		Average Test Cell RH [%]		Average Test Cell Baro [in/Hg]		Vehicle cooling fan speed-Speed Match [SM] or constant speed [CS]		Solar Lamps [W/m2]		Vehicle Climate Control settings		Hood Position [Up] or [Closed]		Window Position [Closed] or [Down]		Cycle Distance [mi]		Cycle Fuel economy [mpg] [Emiss Bag]		Cycle Fuel Consumed [gal] [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													
61505044	UDDS #1, Ph 1+2	CS	05/20/15	-17	8	30	SM	0	72F / FI Mid	Closed	Closed	7.44				11.008	374.0	3897.00	523.73														
61505044	Hwy #1, Ph 3	HS	05/20/15	-14	7	30	SM	0	72F / FI Mid	Closed	Closed	10.25				9.619	364.7	3347.00	326.58														
61505044	UDDS #2, Ph 4+5	HS	05/20/15	-18	8	30	SM	0	72F / FI Mid	Closed	Closed	7.47				8.704	364.4	3064.00	410.04														
61505044	US06 #1, Ph 6+7	HS	05/20/15	-13	6	30	SM	0	72F / FI Mid	Closed	Closed	8.03				9.222	348.1	2997.00	373.43														
61505045	US06 #2, Ph 1+2	HS	05/20/15	-12	6	30	SM	0	72F / FI Mid	Closed	Closed	8.01				8.940	332.1	2773.00	346.09														
61505045	UDDS #3, Ph 3	HS	05/20/15	-17	8	30	SM	0	72F / FI Mid	Closed	Closed	1.24				1.045	335.9	340.00	274.41														
Full charge test summary												Totals	42.44			48.5		16418															
Re-charging information				-17 Temperature during charge [C]								Total energy used during days testing [DC Wh]								16626													
Level: 2												Charge integrated power [AC Wh]								20128													
61505039	UDDS #1, Ph 1+2	CS	05/15/15	-6	9	29	SM	0	72F / FI Mid	Closed	Closed	7.45				8.409	383.9	3133.56	420.63														
61505039	Hwy #1, Ph 3	HS	05/15/15	-4	8	29	SM	0	72F / FI Mid	Closed	Closed	10.26				7.790	374.5	2837.00	276.49														
61505039	UDDS #2, Ph 4+5	HS	05/15/15	-7	9	29	SM	0	72F / FI Mid	Closed	Closed	7.48				6.526	371.9	2366.00	316.30														
61505039	US06 #1, Ph 6+7	HS	05/15/15	-3	7	29	SM	0	72F / FI Mid	Closed	Closed	8.03				7.726	363.6	2651.00	330.04														
61505040	US06 #2, Ph 1+2	HS	05/15/15	-4	9	29	SM	0	72F / FI Mid	Closed	Closed	8.01				8.084	354.4	2721.00	339.75														
61505040	UDDS #3, Ph 3+4	HS	05/15/16	-6	9	29	SM	0	72F / FI Mid	Closed	Closed	7.44				6.087	349.2	2073.00	278.81														
61505040	Hwy #2, Ph 5	HS	05/15/17	-5	8	29	SM	0	72F / FI Mid	Closed	Closed	6.62				5.146	333.8	1685.00	254.56														
Full charge test summary												Totals	55.29			49.8		17467															
Re-charging information				-4 Temperature during charge [C]								Total energy used during days testing [DC Wh]								17635													
Level: 2												Charge integrated power [AC Wh]								20527													
61505028	UDDS #1, Ph 1+2	CS	05/12/15	0	3	29	SM	0	72F / FI low	Closed	Closed	7.44				7.286	385.9	2741.00	368.20														
61505028	Hwy #1, Ph 3	HS	05/12/15	4	3	29	SM	0	72F / FI low	Closed	Closed	10.25				6.847	377.5	2522.79	246.10														
61505028	UDDS #2, Ph 4+5	HS	05/12/15	2	3	29	SM	0	72F / FI low	Closed	Closed	7.50				5.118	375.2	1875.28	250.19														
61505028	US06 #1, Ph 6+7	HS	05/12/15	6	2	29	SM	0	72F / FI low	Closed	Closed	8.03				6.671	369.0	2333.72	290.52														
61505029	US06 #1, Ph 1+2	HS	05/12/15	7	2	29	SM	0	72F / FI low	Closed	Closed	8.03				7.068	363.2	2452.14	305.34														
61505029	UDDS #1, Ph 3+4	HS	05/12/15	2	3	29	SM	0	72F / FI low	Closed	Closed	7.49				5.360	360.1	1894.97	252.85														
61505029	Hwy Ph 5	HS	05/12/15	5	2	29	SM	0	72F / FI low	Closed	Closed	10.27				7.071	346.0	2404.51	234.06														
61505029	UDDS #1, Ph 6+7	HS	05/12/15	2	3	29	SM	0	72F / FI low	Closed	Closed	7.48				2.783	337.1	917.10	122.65														
61505030	SSS Depletion 65mph	HS	05/12/15	1	3	29	SM	0	72F / FI low	Closed	Closed	0.07				0.060	174.6	20.00	304.64														
Full charge test summary												Totals	66.56			48.3		17162															
Re-charging information				4 Temperature during charge [C]								Total energy used during days testing [DC Wh]								18025													
Level: 2												Charge integrated power [AC Wh]								20737													
61505019	UDDS #1, Ph 1+2	CS	05/08/15	23	51	29	SM	0	Off	Closed	Down	7.45				3.233	390.5	1248.00	167.44														
61505019	Hwy Ph 3	HS	05/08/15	25	47	29	SM	0	Off	Closed	Down	10.24				4.945	387.1	1897.00	185.31														
61505019	UDDS #1, Ph 4+5	HS	05/08/15	21	61	29	SM	0	Off	Closed	Down	7.42				3.029	385.9	1153.00	155.45														
61505019	US06 #1, Ph6+7	HS	05/08/15	25	46	29	SM	0	Off	Closed	Down	8.00				5.354	380.2	1982.00	247.86														
61505020	SSS 65mph	HS	05/08/15	26	44	29	SM	0	Off	Closed	Down	15.81				10.376	371.5	3824.00	241.81														
61505020	US06x2, Ph 3+4	HS	05/08/15	25	46	29	SM	0	Off	Closed	Down	8.03				5.499	367.4	1967.00	244.88														
61505021	UDDS #1, Ph 1+2	HS	05/08/15	21	60	29	SM	0	Off	Closed	Down	7.45				3.196	366.1	1155.00	155.02														
61505021	Hwy Ph 3	HS	05/08/15	25	46	29	SM	0	Off	Closed	Down	10.25				5.383	359.4	1918.00	187.06														
61505021	UDDS #1, Ph 4+5	HS	05/08/15	21	60	29	SM	0	Off	Closed	Down	7.47				3.346	352.1	1163.00	155.61														
61505022	SSS Depletion 65mph	HS	05/08/15	27	42	29	SM	0	Off	Closed	Down	8.41				6.396	336.1	2147.00	255.31														
Full charge test summary												Totals	90.54			50.8		18454															
Re-charging information				22 Temperature during charge [C]								Total energy used during days testing [DC Wh]								18564													
Level: 2												Charge integrated power [AC Wh]								21053													
61505014	SSS 0-80-0 0% Grade	HS	05/07/15	24	43	29	SM	0	Off	Closed	Down	6.23				3.584	372.6	1310.00	210.26														
61505015	SSS 0-80-0 6% Grade	HS	05/07/15	24	44	29	SM	0	Off	Closed	Down	6.23				10.621	365.9	3773.00	606.02														
61505016	WOTx5 and Dyno Regen	HS	05/07/15	22	47	29	SM	0	Off	Closed	Down	6.37				-0.990	361.0	-594.00	-93.18														
61505017	Passing Maneuvers 0,3,6% Grade	HS	05/07/15	25	40	29	SM	0	Off	Closed	Down	10.12				12.867	356.4	4324.00	427.10														
61505018	25% Gradeability x2 and Depletion	HS	05/07/15	24	40	29	SM	0	Off	Closed	Down	13.93				3.377	343.6	897.00	64.40														
61505024	UDDS #1, Ph 1+2	CS	05/11/15	35	40	29	SM	850	72F / FI low	Closed	Closed	7.42				3.919	390.4	1516.00	204.32														
61505024	Hwy #1 Ph 3	HS	05/11/15	38	31	29	SM	850	72F / FI low	Closed	Closed	10.25				5.042	387.1	1936.00	188.89														
61505024	UDDS #1, Ph 4+5	HS	05/11/15	34	48	29	SM	850	72F / FI low	Closed	Closed	7.47				3.595	385.4	1372.00	183.60														
61505024	US06 #1, Ph 6+7	HS	05/11/15	38	32	29	SM	850	72F / FI low	Closed	Closed	8.02				5.751	379.4	2133.00	266.03														
61505025	SSS 65mph	HS	05/11/15	39	33	29	SM	850	72F / FI low	Closed	Closed	10.01				6.466	372.5	2388.00	238.65														
61505025	US06 #2 Ph 3+4 - Inc- See Notes	HS	05/11/15	37	38	29	SM	850	72F / FI low	Closed	Closed	6.59				4.839	370.0	1743.41	264.66														
61505026	SC03 Ph 1	HS	05/11/15	34	51	29	SM	850	72F / FI low	Closed	Closed	3.57				1.855	368.9	675.00	188.92														
61505026	SC03 Ph 2	HS	05/11/15	35	39	29	SM	850	72F / FI low	Closed	Closed	3.60				1.977	367.5	717.00	199.35														
61505026	Hwy #2 Ph 3	HS	05/11/15	38	35	29	SM	850	72F / FI low	Closed	Closed	10.25				5.604	363.0	2017.00	196.78														
61505026	UDDS #3, Ph 4+5	HS	05/11/15	34	48	29	SM	850	72F / FI low	Closed	Closed	7.47				3.831	356.4	1350.00	180.64														
61505027	SSS Depletion 65mph	HS	05/11/15	39	29	29	SM	850	72F / FI low	Closed	Closed	10.82				8.157	289.0	2754.00	254.49														
Full charge test summary												Totals	85.47			51.0		18601															
Re-charging information				35 Temperature during charge [C]								Total energy used during days testing [DC Wh]								18834													
Level: 2												Charge integrated power [AC Wh]								21538													