

















ccelera	ated tes	ting in F	hoenix	over	5,440	miles	
PS uni	its track	distanc	e, aver	age a	nd max	kimum	spee
Cycle	Urban	Highway	Charge	Reps	Total	Reps	Miles
(mi)	(10 mi)	(10 mi)	(hr)	(N)	(mi)	(%)	(%)
10	1	0	4	60	600	37%	11%
20	1	1	8	30	600	19%	11%
40	4	0	12	15	600	9%	11%
40	2	2	12	15	600	9%	11%
40	0	4	12	15	600	9%	11%
60	2	4	12	10	600	6%	11%
80	2	6	12	8	640	5%	12%
100	2	8	12	6	600	4%	11%
200	2	18	12	3	600	2%	11%
Total	2,340	3,100	1,344	162	5,440		
Average	43%	57%	8.3	18			

10 mi)	(10 mi)					Gasoline	
	(10 m)	(hr)	(N)	(mi)	kWh	Gals	MPG
1	0	4	60	600	136.33	4.81	127.2
1	1	8	30	600	122.02	5.37	115.9
4	0	12	15	600	84.10	6.05	101.1
2	2	12	15	600	87.22	5.78	106.9
0	4	12	15	600	79.82	8.54	73.1
2	4	12	10	600	55.33	8.98	68.9
2	6	12	8	640	43.99	11.36	58.3
2	8	12	6	600	35.98	8.43	73.2
2	18	12	3	600	15.0	11.02	54.8
2540	3100	1404	167	5,440	Weighted A	verage	86.4
	1 4 2 0 2 2 2 2 2 2 2 540	1 1 4 0 2 2 0 4 2 4 2 6 2 8 2 18 2540 3100	1 1 8 4 0 12 2 2 12 0 4 12 2 4 12 2 4 12 2 6 12 2 6 12 2 8 12 2 18 12 2540 3100 1404	1 1 8 30 4 0 12 15 2 2 12 15 0 4 12 15 2 4 12 15 2 6 12 8 2 6 12 8 2 8 12 6 2 18 12 3 2540 3100 1404 167	1 1 8 30 600 4 0 12 15 600 2 2 12 15 600 0 4 12 15 600 0 4 12 15 600 2 4 12 10 600 2 6 12 8 640 2 8 12 6 600 2 18 12 3 600 2540 3100 1404 167 5,440	1 1 8 30 600 122.02 4 0 12 15 600 84.10 2 2 12 15 600 87.22 0 4 12 15 600 87.22 0 4 12 15 600 87.22 0 4 12 15 600 79.82 2 4 12 10 600 55.33 2 6 12 8 640 43.99 2 8 12 6 600 35.98 2 18 12 3 600 15.0 2540 3100 1404 167 5,440 Weighted A	1 1 8 30 600 122.02 5.37 4 0 12 15 600 84.10 6.05 2 2 12 15 600 87.22 5.78 0 4 12 15 600 87.22 5.78 0 4 12 15 600 79.82 8.54 2 4 12 10 600 55.33 8.98 2 6 12 8 640 43.99 11.36 2 8 12 6 600 35.98 8.43 2 18 12 3 600 15.0 11.02 2540 3100 1404 167 5,440 Weighted Average

Cycle	Urban	Highway	Charge	Reps	Total	Electricity	Gase	oline
(mi)	(10 mi)	(10 mi)	(hr)	(N)	(mi)	kWh	Gals	MPG
10	1	0	4	60	600	115.58	4.78	128.1
20	1	1	8	30	600	86.21	7.95	77.9
40	4	0	12	15	600*	25.00	14.29	42.7
40	2	2	12	5	600*	Testing		
40	0	4	12	5	600*	32.44	11.36	55.5
60	2	4	12	10	600	65.00	5.90	103.7
80	2	6	12	8	640	39.04	10.09	65.8
100	2	8	12	6	600	22.67	8.81	70.8
200	2	18	12	3	600	12.98	10.46	57.8
Fotal	2340	2500	984	147	4840	Weighted A	verage	

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Cycle	Urban	Highway	Charge	Reps	Total	Electricity	Gaso	line
(mi)	(10 mi)	(10 mi)	(hr)	(N)	(mi)	AC kWh	Gals	MPG
10	1	0	4	60	600	Testing		
20	1	1	8	30	600	163.29	13.51	45.7
40	4	0	12	15	600	57.51	14.91	41.1
40	2	2	12	15	600	76.29	15.99	38.7
40	0	4	12	15	600	114.14	11.92	51.5
60	2	4	12	10	600	97.18	13.70	45.3
80	2	6	12	8	640	77.69	16.05	41.3
100	2	8	12	6	600	58.64	15.69	39.8
200	2	18	12	3	600	26.09	17.72	33.5
Total	2340	3100	1344	162	5440	Weighted	Average	
Total Each to	2340 otal distanc	3100 e slightly gre	1344 eater than 6	162 600 miles	5440 HEV ve	Weighted	Average	

Cycle	Urban	Highway	Charge	Reps	Total	Electricity	Gase	oline
(mi)	(10 mi)	(10 mi)	(hr)	(N)	(mi)	AC kWh	Gals	MPG
10	1	0	4	60	600			
20	1	1	8	30	600			
40	4	0	12	15	600	71.3	16.42	37.3
40	2	2	12	15	600	69.8	14.34	43.1
40	0	4	12	15	600	55.84	20.73	29.8
60	2	4	12	10	600	44.79	16.64	37.3
80	2	6	12	8	640	42.72	16.30	40.8
100	2	8	12	6	600	20.85	21.17	29.2
200	2	18	12	3	600			
fotal	2340	3100	1344	162	5440	Weighted A	verage	
Each to	otal distanc	e slightly gre	eater than 6	00 miles	. HEV ve	rsion = 27 mpg		

Cycle	Urban	Highway	Charge	Reps	Total	Elect	ricity	Gas	oline
(mi)	(10 mi)	(10 mi)	(hr)	(N)	(mi)	AC kWh	Mi/kWh	Gals	MPG
10	1	0	4	60	600	359.60	1.7	0	
20	1	1	8	30	600	131.96	4.6	0	
40	4	0	12	5	200	35.18	5.6	0	
40	2	2	12	5	200	33.22	6.0	0	
40	0	4	12	5	200	28.60	7.0	0	
60	2	4	12	10	600	57.96	10.4	13.3	45.1
80	2	6	12	8	640	44.62	14.4	16.6	38.0
100	2	8	12	6	600	Deleted*			
200	2	18	12	3	600	Deleted*			
Total	1560	1480	876	123	3,040				
		Ŋ	* Testing e distan	nded wh Ice sligh	en gasol tly greate	ine engine an er than 600 mi	id inverter fa iles.	iled. Eac	h total











26 Hymotion Prius - January thru May 2008

• Below averages do NOT tell the whole PHEV energyuse potential – see following May-only slides

Charge / Operating Mode	Number of Trips	Distance Traveled (Miles)	Miles per Gallon
Charge Depleting (CD)	3,073	14,820	59
Mixed CD / CS	404	11,121	49
Charge Sustaining (CS)	1,358	16,059	40
All trips combined	4,835	42,000	48



13 Hymotion Prius in May 2008 - MPG

 Below averages do NOT tell the whole PHEV energy use potential – see following slides

Charge / Operating Mode	Number of Trips	Total Distance (Miles)	Average Trip Distance (miles)	MPG	DC kWh per Mile
Charge Depleting (CD)	575	3,040	5.3	72.0	0.138
Mixed CD / CS	67	1,840	27.5	52.1	0.050
Charge Sustaining (CS)	133	1,411	10.6	40.2	
Electric vehicle only (EV)	137	127	0.9		0.236
Total	912	6,417	7.0		
CD, CS, CD/CS results (excludes EV results)	775	6,291	8.1	55.9	
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