70% Capacity

30% Battery Degradation

Rav4 Range Chart for 41.8 kWh Tesla Battery

Level Road, No Heating/Air Conditioning, Ambient/Battery Temp 70F, Windows Closed

English Measure

QUICK CHARGE POWER

45	50	55	60	65	70	75	80	85	Speed MPH
exactly - or -									
4.7	**4.3**	**3.9**	**3.6**	**3.4**	**3.1**	**2.7**	**2.4**	**2.0**	Miles/**kWh**
9.57	**11.63**	**14.10**	**16.67**	**19.12**	**22.58**	**27.78**	**33.33**	**42.50**	**kW**

Usable kWh	Total %	Segment kWh	Fuel Bar	0.213	0.233	0.256	0.278	0.294	0.323	0.370	0.417	0.500	kWh/mile
29.8	100	0.0		140	128	116	107	101	92	80	71	60	**100%** Extended Range Charge
29.8	100	1.9	16	140	128	116	107	101	92	80	71	60	**Full**
27.9	94	1.9	15										
26.0	87	1.9	14	122	112	101	94	88	81	70	62	52	
24.1	81	1.9	13										
22.3	75	1.9	12	105	96	87	80	76	69	60	53	45	**3/4**
20.4	69	1.9	11										
18.5	62	1.9	10	87	80	72	67	63	57	50	44	37	
16.7	56	1.9	9										
14.8	50	1.9	8	70	64	58	53	50	46	40	35	30	**1/2**
12.9	43	1.9	7										
11.1	37	1.9	6	52	48	43	40	38	34	30	27	22	
9.2	31	1.9	5										
7.3	25	1.9	4	34	31	29	26	25	23	20	18	15	**1/4**
5.4	18	1.9	3										
3.6	12	1.9	2- LBW	17	15	14	13	12	11	10	9	7	
1.7	6	1.7	1- VLB										
	0	0.0	0- CCL	0	0	0	0	0	0	0	0	0	**Empty**

Turtle	**Get Safely Off Road Now!** ***Less than One Half Mile at 35 mph Max***	**Turtle**

mph	**45**	**50**	**55**	**60**	**65**	**70**	**75**	**80**	**85**
Miles/kWh	*4.7*	*4.3*	*3.9*	*3.6*	*3.4*	*3.1*	*2.7*	*2.4*	*2.0*

Fuel Bar 2 = Low Battery Warning (LBW); Fuel Bar 1 = Very Low Battery; Fuel Bar 0 = Climate Control Limted (CCL)

Range can be significantly reduced battery cell imbalances - the car can stop with one fuel bar

This chart's range data is not associated with the the dash estimated range data (GOM), or EnTunes data

Data: 41.8kWh usable new battery capacity factor. MAXIMUM RANGE at about 15-20mph (not average speed)

Add **One mile** of range @ 65mph (or 3.4m/kWh) for every **17 minute** charge at **120 volt / 12 amp**

Add **One mile** of range @ 65mph (or 3.4m/kWh) for every **3 minutes** of charge at **208 volt / 30 amp**

For Urban Stop-Go driving, select data from column that matches estimated miles/kWh column, NOT speed

1. Elevation: Subtract 1.8kWh for every 1000 ft
Add 1kWh for every 1000 ft decrease

2. Wind: Select Speed based on Headwind; 60mph with 10mph headwind equals 70mph data

3. Temperature: Reserved until such time as we learn the power requirements of TMS

4. Battery Degradation: expect 10% at 50,000 miles and 20% at 100,000 miles

5. Climate Control: seat heaters use only 0.025kW! The cabin heater & batttery heater use 6kW each

5b. Cabin air conditioning is very efficient and a low consumption user compared to heaters

6. Density Altitude: Increase range 1% per 1000 ft for air density above sea level

7. Heavily loaded cars and cars driving through standing water, snow or slush use more energy

English

Ver 70.2