

Vehicle Info

Make	Kia	Plate No.	07ha2030
Model	EV6	VIN	KNAC581CPRA201878
Year	2024	Mileage	48,194 km
Fuel Type	Other Fuel	Diagnosed	2026.07.13.

SOH Status

BMS SOH
100.0 %

Estimated SOH
100.0 %

Cell Status

Normal Cells
192 / 192

Fault / Caution Cells
0 / 0

Temperature Status

Max Temp During Charging
32 °C

Temp Range (min-max)
29 ~ 32 °C

SOH Analysis

Estimates actual battery capacity based on the charge amount (Ah) and SOC change (%) during the charging session. Current estimated SOH 100.0% is compared to same-model average (100.0%) is at a similar level compared to the reference.

Cell Analysis

Total 192 cells, Normal 192, Fault 0, Caution 0 confirmed. Overall rating: Normal. All cells are operating within normal range.

Module Temperature Analysis

Maximum inter-module temperature deviation during charging is 3.0°C, within the charging correction criteria. Average module temperature deviation of 2.5°C is within the correction criteria ($\leq 4.5^\circ\text{C}$, medium-charge corrected, reference 3°C). Average module temperature rise is 1.2°C. Overall thermal management rating: 'Good'.

AI Summary

In summary, the current battery is in excellent condition, with a charging-data-based quality score of 98.8 points.

- No fault codes (DTC) detected: current, pending, or historical.
- Estimated SOH 100.0% is similar to the same-model average of 100.0% (within $\pm 2\%$).
- Average inter-cell voltage deviation is 18mV; cell balance is excellent.
- Average module temperature deviation is 2.5°C, within the charging correction criteria ($\leq 4.5^\circ\text{C}$, medium-charge corrected, reference 3°C).



WeSCAN-20260713-084E63B1

This report certifies that Wecar Mobility Co., Ltd. and Betterwhy Co., Ltd.'s jointly developed WeSCAN diagnostic solution was used to analyze scan data and produce these objective, certified results.

2026. 07. 13.

Wecar Mobility Co., Ltd. CEO (seal)

Betterwhy Co., Ltd. CEO (seal)



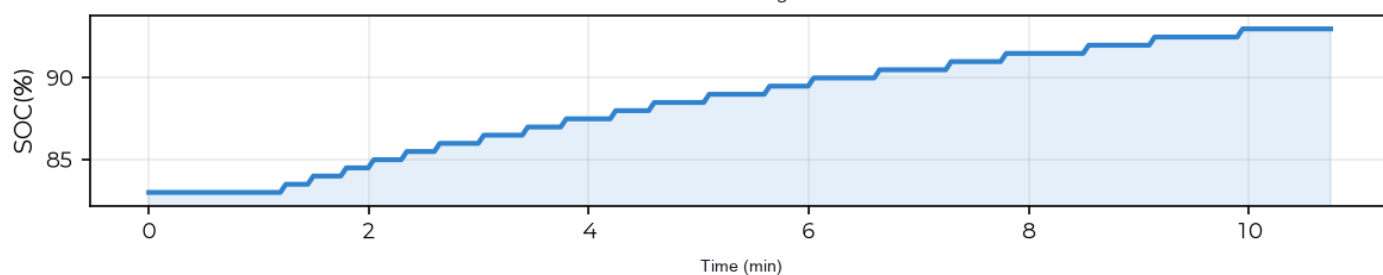
Charging Data

Charge Info

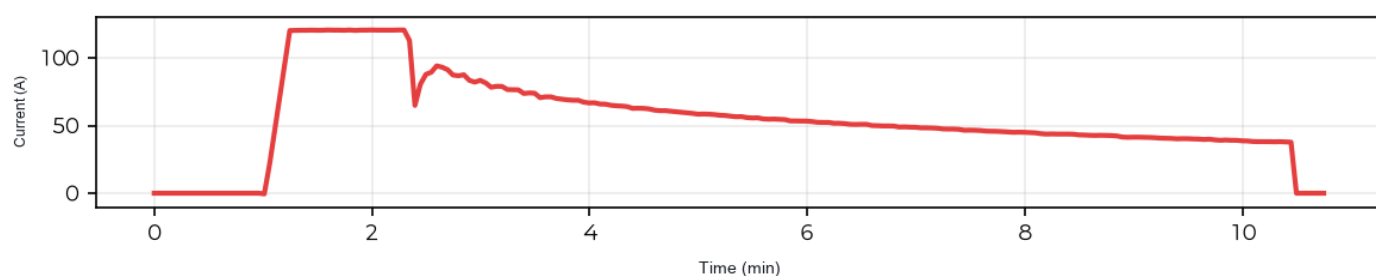
Based on this charging session

Display SOC	83.0% → 93.0%	Charge Time	10.7min
Avg Power	43.8kW	Current (avg/max)	55 / 121 A
Temp (avg)	30.0°C	Temp Range	29~32°C
Data Samples	213	Charge Amount	7.8kWh

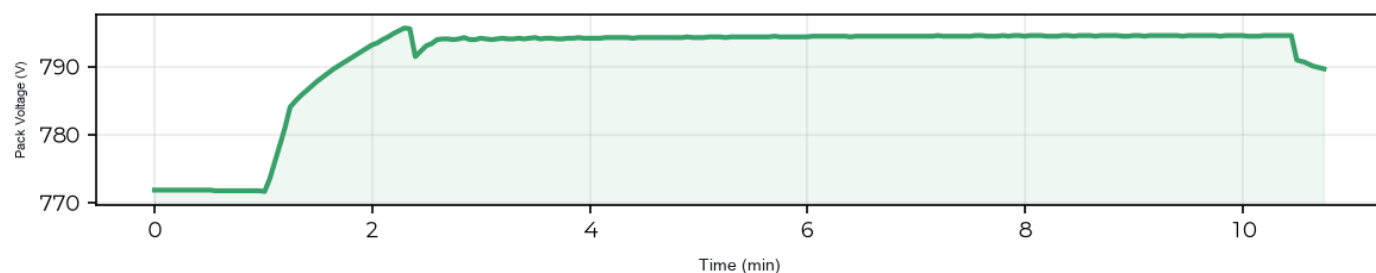
SOC Change



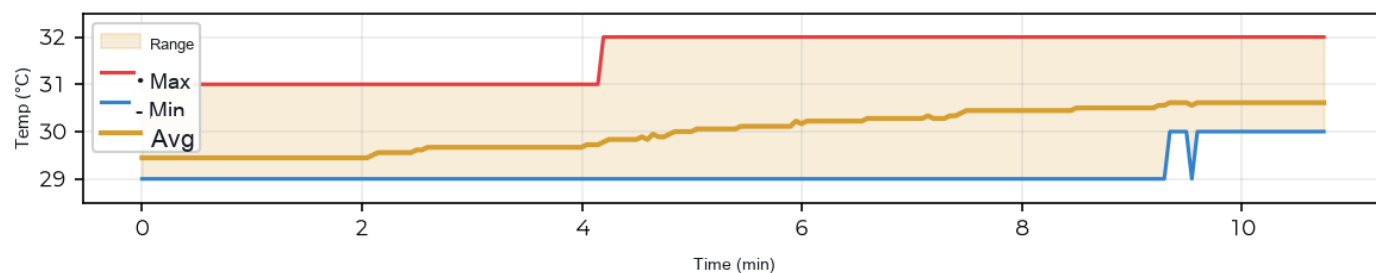
Charging Current



Pack Voltage Change



Temperature Change (Max / Min / Avg)



Capacity Retention (SOH) Analysis

BMS SOH

100.0%

Vehicle BMS Value

Estimated SOH

100.0%

Charge-based · <30k km
100%

Same-Model Average

100.0%

2,196 comparison vehicles · Under 30,000km
Reference 100%

vs. Same Model

+0.0%

Top 0%

Same-model average 100.0% (±2%: similar-level threshold)

Measurement Conditions (This Session)

Based on this charging session

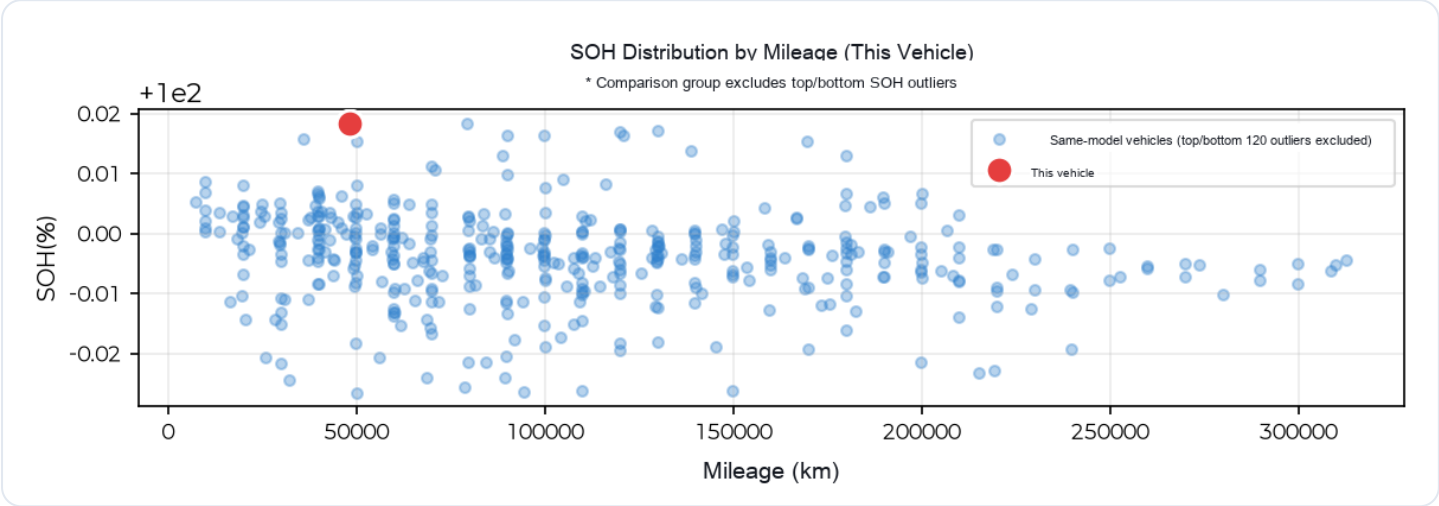
BMS SOC	81.5% → 90.5%	BMS SOC Change	+9.0%
Display SOC	83.0% → 93.0%	Display SOC Change	+10.0%
Charge Time	10.7min	Charge Amount	7.8kWh
Temp (avg)	30.0°C	Temp Range	29~32°C
Current (avg)	55A	Current (max)	121A
Avg Power	43.8kW	Data Samples	213

Guide: SOH and cell voltage deviation are affected by temperature, SOC, and current conditions. Estimated SOH and comparison charts are relative values, with the average estimated capacity of same-model vehicles under 30,000km set to 100% . Only BMS SOH is the raw value reported by the vehicle's BMS.

Data Quality: Current fluctuation is relatively high, so some metrics may be over- or under-estimated.

SOH Detailed Analysis (Category score: 100.0 · Weight 50%)

Item	Measured	Score	Assessment
Estimated SOH	100.0%	100	Excellent
BMS SOH (reference)	100%	100	Excellent



Capacity Estimate (charge-based)

Estimates the battery's actual capacity using the charge amount (Ah) and SOC change (%) observed during charging. Current estimated SOH 100.0% is similar to the same model level.

Cell Voltage Analysis

Cell Count
192
Total

Voltage Deviation
18.5
mV · Max in pack

Fault/Caution Cells
0/0
Fault / Caution

Overall Rating
Normal
Category 100.0 · 25%

Pack Balance Detailed Analysis (Category score: 100.0 · Weight 25%)

Item	Measured	Score	Assessment
Pre-Charge Cell Voltage Deviation (limit)	20mV	100	Excellent
Avg Deviation During Charging	18.6mV	100	Excellent
Max Deviation During Charging	20mV	100	Excellent
Post-Charge Cell Voltage Deviation (limit)	8mV	100	Excellent

Measurement Conditions

Relative Comparison Within Pack · This Session

Voltage Deviation

18.5mV

Display SOC Change

+10.0%

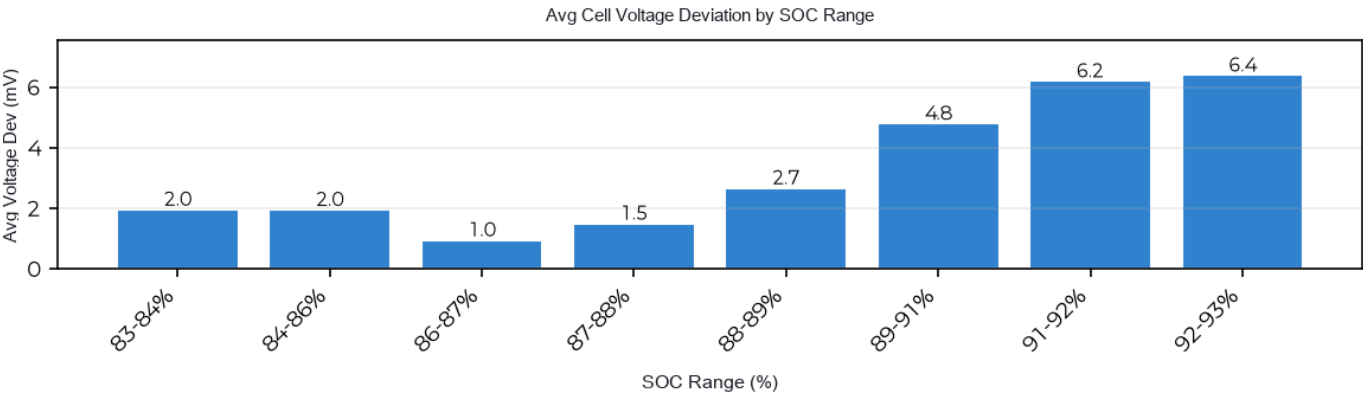
Temp Range

29~32°C

Cell Analysis Data

187

Guide: Voltage deviation is a relative comparison within the pack. The chart below shows the mean absolute deviation (MAE, mV) from the cell average for each SOC interval.



Cell Voltage Analysis · Per-Cell Patterns

The voltage difference is near the measurement limit, so very fine per-cell differences are hard to distinguish.

If a problem cell is detected, the overall grade is capped (Fault cell → max C-65 pts, Caution cell → max B-80 pts). Not applied if there are no problem cells.

Cell comparison used only the 187 data points where charging was actually in progress. 26 idle/waiting points (of 213 total) were excluded from the comparison.

Attention Needed — Bottom 5 Cells by Score

Cell	Assessment	Score	①	②	③	④	⑤
#101	Normal	90	—	—	-2	-8	—
#52	Normal	90	—	—	-2	-8	—
#127	Normal	90	—	—	-2	-8	—
#4	Normal	90	—	-1	-2	-7	—
#104	Normal	91	—	—	-2	-7	—

Good — Top 5 Cells by Score

Cell	Assessment	Score	①	②	③	④	⑤
#1	Normal	100	—	—	—	—	—
#7	Normal	100	—	—	—	—	—
#12	Normal	100	—	—	—	—	—
#29	Normal	100	—	—	—	—	—
#32	Normal	100	—	—	—	—	—

①-⑤: Deductions by item (— = N/A · deduction -N). Score = 100 minus risk score (100 = Good).

Overall Score by Cell (0-100)

Cell No. · Color = Assessment

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168
169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192

Good (≥70)

Observe (40-69)

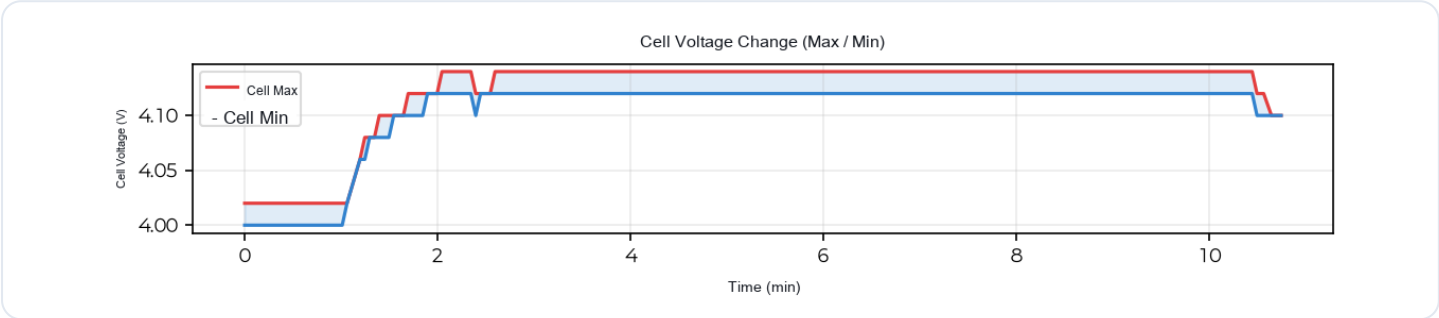
Caution (20-39)

Fault (≤19)

Overall score (0-100) = 100 minus risk score (sum of deductions ①-⑤). Closer to 100 is better, closer to 0 is worse. Each item is deducted only for the excess above its threshold (mV)

③ Volatility and ⑤ Max Deviation apply in-pack distribution thresholds. For packs at the 20mV resolution limit, the overall risk score is capped at 10 (min. displayed 90). ≥70 Normal · 40-69 Observe · 20-39 Caution · ≤19 Fault

Cell Voltage Change (Max / Min)



Cell Voltage Analysis · Per-Cell Metrics

① Low-V Deviation

Collects only periods below the pack average voltage and averages the deviation size. Higher values indicate a higher likelihood of a persistently low-voltage cell.

Attention (high value)

Good (low value)

Cell	mV	Cell	mV
#6	3.2	#60	0.0
#18	3.2	#97	0.0
#150	3.2	#122	0.0
#174	3.2	#145	0.0
#30	3.1	#51	0.1

② High-V Deviation

Collects only periods above the pack average voltage and averages the deviation size. Higher values indicate a higher likelihood of a persistently high-voltage cell.

Attention (high value)

Good (low value)

Cell	mV	Cell	mV
#145	15.3	#3	0.0
#97	14.9	#5	0.0
#60	13.8	#6	0.0
#122	13.7	#15	0.0
#51	13.3	#16	0.0

③ Volatility

Standard deviation of the deviation from the average at each point. Higher values indicate the relative position during charging is an unstably fluctuating cell.

Attention (high value)

Good (low value)

Cell	mV	Cell	mV
#102	8.8	#1	1.9
#53	8.6	#7	1.9
#92	8.6	#12	1.9
#107	8.6	#29	1.9
#4	8.5	#32	1.9

④ 1st/2nd-Half Shift

The average deviation difference between the first and second half of charging. Higher values mean the relative position during charging... the pattern shifts (low/high).

Attention (high value)

Good (low value)

Cell	mV	Cell	mV
#101	13.9	#88	0.3
#127	13.7	#96	0.3
#52	13.5	#40	0.5
#104	13.1	#134	0.5
#4	12.8	#27	0.7

⑤ Max Deviation

The maximum absolute deviation recorded at any single moment during the charging session. Even a normally healthy cell can momentarily captures large, sharp spikes.

Attention (high value)

Good (low value)

Cell	mV	Cell	mV
#145	19.9	#1	10.0
#97	19.8	#7	10.0
#49	19.7	#12	10.0
#60	19.7	#19	10.0
#122	19.7	#24	10.0

Metric Deduction Criteria (excess over threshold)

① Low-V Deviation	Excess over $8\text{mV} \times 1.0 \text{ pt/mV}$ (no penalty below threshold pts)
② High-V Deviation	Excess over $8\text{mV} \times 0.8 \text{ pt/mV}$ (no penalty below threshold pts)
③ Volatility	Excess over $\max(7\text{mV}, \text{pack median}) \times 1.0 \text{ pt/mV}$ · For packs at the 20mV resolution limit, the overall risk-score ceiling 10
④ 1st/2nd-Half Shift	Excess over $6\text{mV} \times 1.0 \text{ pt/mV}$ (no penalty below threshold pts)
⑤ Max Deviation	Excess over $\max(20\text{mV}, \text{pack 40th \%ile}) \times 0.8 \text{ pt/mV}$ · For packs at the 20mV resolution limit, overall risk score cap 10

Analysis Result

[Pack Balance] Voltage deviation 18.5mV. Cell balance is good.

[Cell Pattern] Max in-pack voltage deviation is 20mV, within measurement resolution. No clear anomaly pattern detected.

Score by Cell: 100 minus risk score (①-⑤). ≥ 70 Good · 40-69 Observe · 20-39 Caution · ≤ 19 Fault.

Thermal Management Analysis

Medium-Rate Charging Avg 43.8kW · Score corrected for medium-rate charging (correction factor ×1.5)

Module Avg Rise
1.2
°C (before/after charge)

Cell Temp Deviation
3.0
°C (max)

Temp Range
29 ~ 32
°C (min-max)

Overall Rating
Good
Thermal Status

Thermal Detailed Analysis (Category score: 95.0 · Weight 25%)

Item	Measured	Score	Assessment
Avg Module Temp Deviation	2.49°C	100	Excellent
Max Module Temp Deviation	3°C	100	Excellent
Max Rise Deviation During Charging	2°C	90	Excellent
Module Temp Rise Uniformity (lower = more uniform)	27.5%	90	Excellent

Temp Rise by Module (highest: Module #6, 31.0°C)

#1
+1.0°C

#2
+1.0°C

#3
+1.0°C

#4
+1.0°C

#5
+1.0°C

#6
+2.0°C

#7
+1.0°C

#8
+2.0°C

#9
+1.0°C

#10
+2.0°C

#11
+1.0°C

#12
+1.0°C

#13
+1.0°C

#14
+1.0°C

#15
+1.0°C

#16
+1.0°C

#17
+1.0°C

#18
+1.0°C

Measurement Conditions (Temp)

Temperature Characteristics During Charging

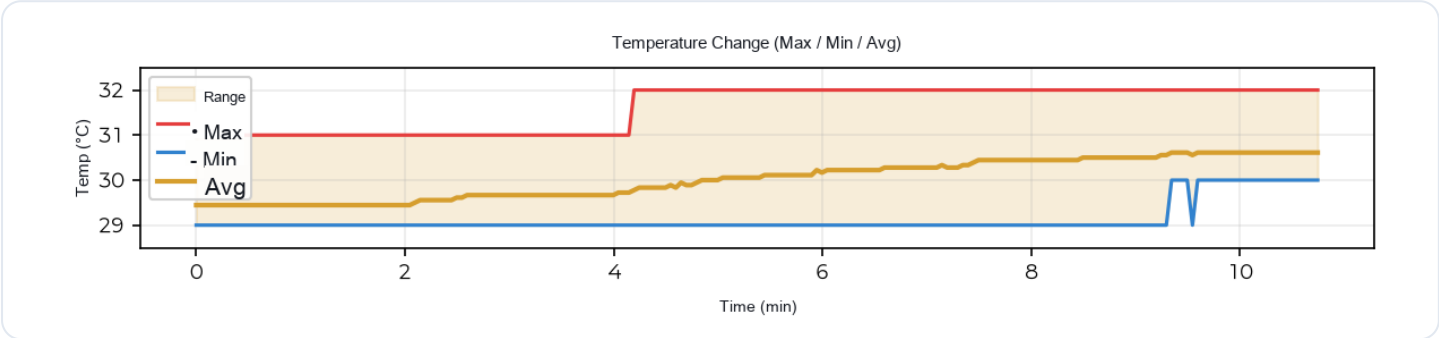
Temp (avg)
30.0°C

Temp Range
29~32°C

Current (avg)
55A

Avg Power
43.8kW

Guide: Temperature rise is affected by charging power and ambient/initial temperature. Results may vary by season or parking conditions even for the same vehicle.



Thermal Management Result

Maximum inter-module temperature deviation during charging is 3.0°C, within the charging correction criteria. Average module temperature deviation of 2.5°C is within the correction criteria (≤ 4.5°C, medium-charge corrected, reference 3°C)

Average module temperature rise is 1.2°C. Overall thermal management rating: 'Good'.