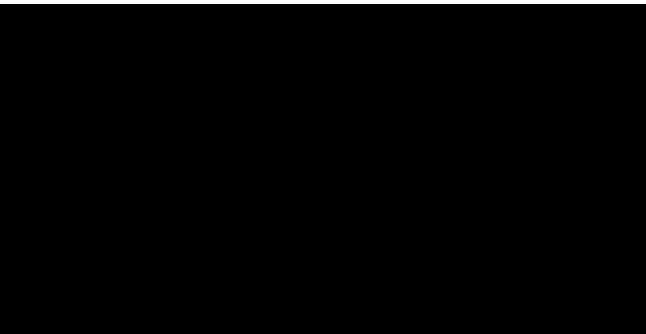


Against the backdrop of the global solar PV industry's accelerated transition to high-efficiency N-type modules, parking lots, as one of the core application scenarios for distributed PV, feature low installation tilt angles, significant fluctuations in ground reflection, and frequent changes in ambient temperature—all of which place higher requirements on the comprehensive performance of modules. Recently, Jinko Solar conducted a four-month field test (from Jul 29 to Nov 12, 2025) in the Matn District of Mount Lebanon Governorate (east of Beirut, Lebanon). Focusing on the power generation performance differences between Tiger Neo modules and N-type BC bifacial modules, the test accurately captured operational data under varying irradiance levels, ambient temperatures, and ground reflection conditions to comprehensively evaluate the outdoor actual performance of the two module types. This provides authoritative data support for the design optimization and product selection of PV parking lot systems.

Key Conclusions

1.Outstanding Advantages in Early/Late Low-Irradiance and High-Temperature Periods: During the early morning (7:00-8:00) and late afternoon (17:00-18:00) when irradiance intensity is typically in the low-light range of 100-200 W/m², Tiger Neo modules demonstrated exceptional performance. Specifically, their power generation output was **5.21%** higher than that of N-type BC modules in the morning, with a yield gain of **8.93%** in the late afternoon. The core reason lies in their superior low-light response characteristics.

2.Significant Performance Improvement in Midday High-Reflection Period: During midday (12:00-13:00), the reduced number of parked vehicles in the parking lot area leads to a marked increase in ground reflection intensity. Leveraging its higher bifacial factor, Tiger Neo modules achieved a **2.75%** power generation yield gain—exceeding the daily average level and fully unleashing its performance potential in high-reflection scenarios.



Project Background

This test focuses on the power generation performance differences between two mainstream bifacial modules (Tiger Neo and N-type BC) in the typical parking lot application scenario. It emphasizes analyzing performance variations under key operating conditions such as low irradiance, high temperature

and high reflection intensity.

