

30 ft screen height, 5.5 ft player eye height, and 20 ft runoff:

Key protection angles

Player location	Distance from screen	Screen protects when sun is below
Near baseline	20 ft	~51°
Net / mid-court	59 ft	~22.6°
Opposite baseline	98 ft	~14°

April 15 — Olney, IL

Time	Sun angle	30-ft screen impact
7:34 AM	14°	Protects full court to opposite baseline
8:19 AM	22.6°	Protects to mid-court/net area
8:57 AM	30°	Partial protection only
4:49 PM	30°	Partial protection only
5:27 PM	22.6°	Protects to mid-court/net area
6:11 PM	14°	Protects full court to opposite baseline

September 15 — Olney, IL

Time	Sun angle	30-ft screen impact
7:49 AM	14°	Protects full court to opposite baseline
8:34 AM	22.6°	Protects to mid-court/net area
9:14 AM	30°	Partial protection only
4:21 PM	30°	Partial protection only
5:01 PM	22.6°	Protects to mid-court/net area
5:46 PM	14°	Protects full court to opposite baseline

Bottom line

A **30-ft vertical batter's-eye-style screen** is a feasible mitigation for the **worst low-angle sun**, especially:

- April 15: before **8:19 AM** and after **5:27 PM**
- September 15: before **8:34 AM** and after **5:01 PM**
- **The hours between 8:30 AM and 5:15 PM will have partial sun hitting some or all of the court.**

It does **not fully eliminate glare** during the broader morning/evening window when the sun is higher than $\sim 22.6^\circ$ but still generally in the player's line of sight.