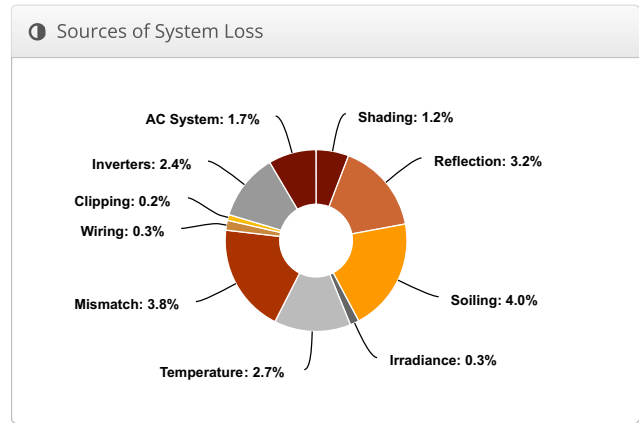
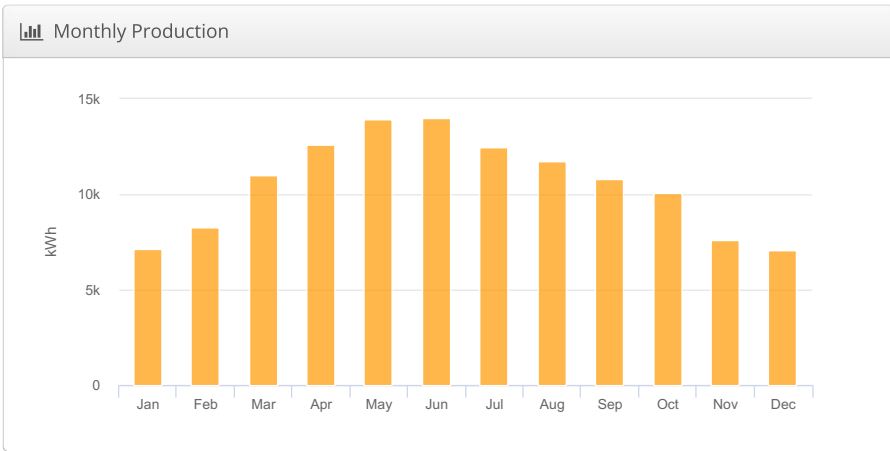
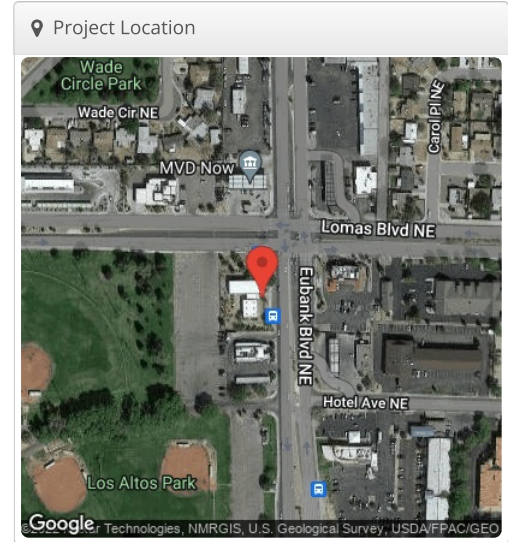


# Roof Only Los Altos Swimming Pool, 10300 Lomas Blvd NE

Report	
Project Name	Los Altos Swimming Pool
Project Address	10300 Lomas Blvd NE
Prepared By	OE Solar info@osceolaenergy.com

System Metrics	
Design	Roof Only
Module DC Nameplate	71.8 kW
Inverter AC Nameplate	69.0 kW Load Ratio: 1.04
Annual Production	126.7 MWh
Performance Ratio	81.8%
kWh/kWp	1,764.5
Weather Dataset	TMY, 10km grid (35.05,-106.55), NREL (prospector)
Simulator Version	976710bd6f-d16b7b72d4-0dcfd22a50-1d0eb092a8



Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m <sup>2</sup> )	Annual Global Horizontal Irradiance	2,042.9	
	POA Irradiance	2,156.5	5.6%
	Shaded Irradiance	2,131.7	-1.2%
	Irradiance after Reflection	2,062.9	-3.2%
	Irradiance after Soiling	1,980.4	-4.0%
	<b>Total Collector Irradiance</b>	<b>1,980.4</b>	<b>0.0%</b>
Energy (kWh)	Nameplate	142,265.4	
	Output at Irradiance Levels	141,808.2	-0.3%
	Output at Cell Temperature Derate	137,969.6	-2.7%
	Output After Mismatch	132,669.1	-3.8%
	Optimal DC Output	132,210.2	-0.3%
	Constrained DC Output	131,943.1	-0.2%
	Inverter Output	128,832.1	-2.4%
	<b>Energy to Grid</b>	<b>126,658.7</b>	<b>-1.7%</b>
Temperature Metrics			
	Avg. Operating Ambient Temp		14.2 °C
	Avg. Operating Cell Temp		24.2 °C
Simulation Metrics			
	Operating Hours	4648	
	Solved Hours	4648	

Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, 10km grid (35.05,-106.55), NREL (prospector)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type	a	b	Temperature Delta								
	Fixed Tilt	-3.56	-0.075	3°C								
	Flush Mount	-2.81	-0.0455	0°C								
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	4	4	4	4	4	4	4	4	4	4	4	4
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	0.75%											
Module Characterizations	Module	Uploaded By		Characterization								
	CS3U-370MB-AG (Canadian Solar)	HelioScope		Spec Sheet Characterization, PAN								
Component Characterizations	Device	Uploaded By		Characterization								
	PVI 23TL-480 (Solectria)	HelioScope		Default Characterization								

**Components**

Component	Name	Count
Inverters	PVI 23TL-480 (Solectria)	3 (69.0 kW)
AC Panels	3 input AC Panel	1
AC Home Runs	6 AWG (Aluminum)	3 (1,197.5 ft)
AC Home Runs	4 AWG (Aluminum)	1 (257.9 ft)
Strings	10 AWG (Copper)	14 (1,901.3 ft)
Module	Canadian Solar, CS3U-370MB-AG (370W)	194 (71.8 kW)

**Wiring Zones**

Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	13-19	Along Racking

**Field Segments**

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	10°	220.815°	1.5 ft	1x1	194	194	71.8 kW

**Detailed Layout**

