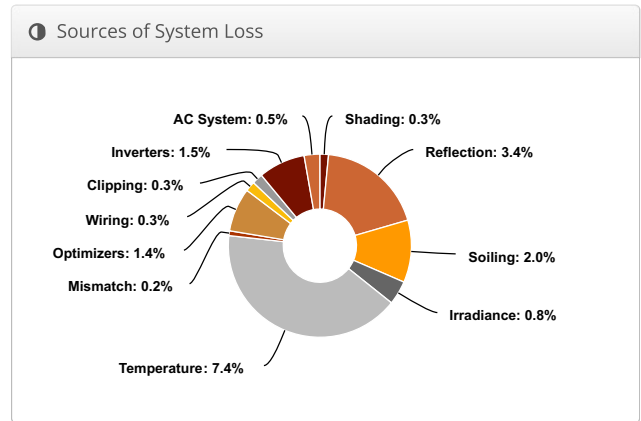
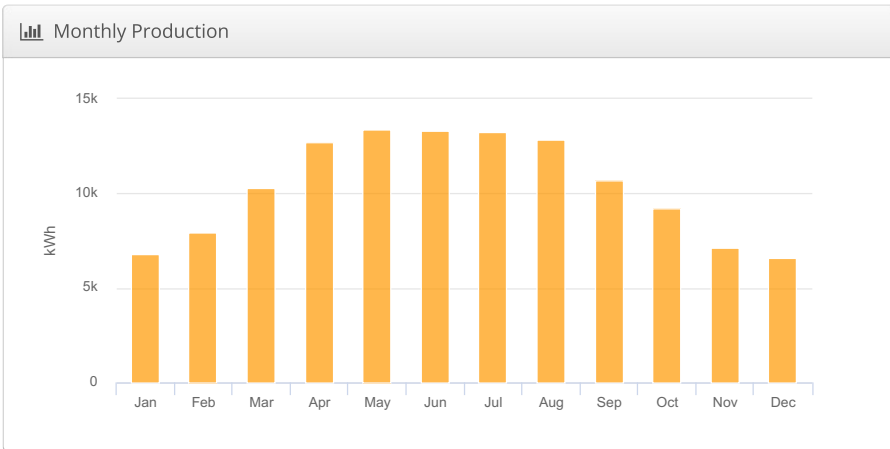
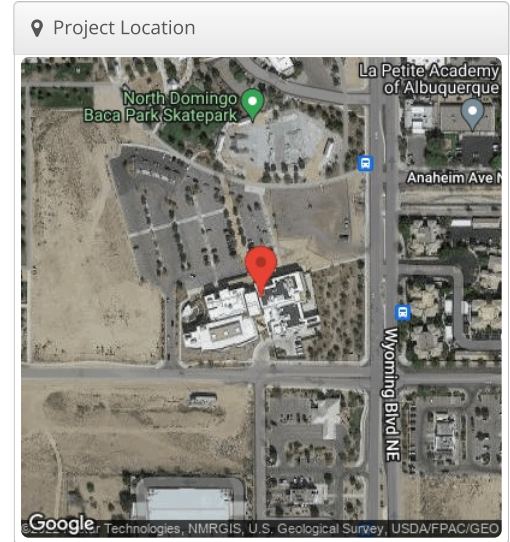


72.4 kW Roof Mount COA Domingo Baca, 7521 Caramel Ave NE, Albuquerque NM

Report	
Project Name	COA Domingo Baca
Project Address	7521 Caramel Ave NE, Albuquerque NM
Prepared By	Zach Johnson zach@sollunasolar.com

System Metrics	
Design	72.4 kW Roof Mount
Module DC Nameplate	72.4 kW
Inverter AC Nameplate	66.6 kW Load Ratio: 1.09
Annual Production	124.2 MWh
Performance Ratio	83.1%
kWh/kWp	1,716.4
Weather Dataset	TMY, ALBUQUERQUE INTL ARPT [ISIS], NSRDB (tmy3, l)
Simulator Version	70e353687f-301d24fcb-8f3cf974d4-5e9aee986c



Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,980.4	
	POA Irradiance	2,064.4	4.2%
	Shaded Irradiance	2,058.8	-0.3%
	Irradiance after Reflection	1,987.9	-3.4%
	Irradiance after Soiling	1,948.1	-2.0%
	Total Collector Irradiance	1,948.1	0.0%
Energy (kWh)	Nameplate	141,115.3	
	Output at Irradiance Levels	140,038.5	-0.8%
	Output at Cell Temperature Derate	129,607.2	-7.4%
	Output After Mismatch	129,407.3	-0.2%
	Optimizer Output	127,594.1	-1.4%
	Optimal DC Output	127,185.6	-0.3%
	Constrained DC Output	126,753.6	-0.3%
	Inverter Output	124,852.3	-1.5%
	Energy to Grid	124,228.0	-0.5%
Temperature Metrics			
	Avg. Operating Ambient Temp		17.3 °C
	Avg. Operating Cell Temp		32.1 °C
Simulation Metrics			
	Operating Hours	4566	
	Solved Hours	4566	

Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, ALBUQUERQUE INTL ARPT [ISIS], NSRDB (tmy3, I)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Diffusion Model											
Temperature Model Parameters	Rack Type	U _{const}					U _{wind}					
	Fixed Tilt	21					0					
	Flush Mount	15					0					
	East-West	29					0					
Soiling (%)	Carport	29					0					
	J	F	M	A	M	J	J	A	S	O	N	D
	2	2	2	2	2	2	2	2	2	2	2	2
	Irradiation Variance 5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	0.50%											
Module Characterizations	Module	Uploaded By	Characterization									
	CS3U-375MS 1500V (Canadian Solar Inc.)	HelioScope	CS3U-375MS_MIX_CSI_EXT_V6_61_1500V_2017Q2.PAN, PAN									
Component Characterizations	Device	Uploaded By	Characterization									

Components		
Component	Name	Count
Inverters	SE66.6K (SolarEdge)	1 (66.6 kW)
Strings	10 AWG (Copper)	5 (972.2 ft)
Optimizers	P800S (SolarEdge)	98 (78.4 kW)
Module	Canadian Solar Inc., CS3U-375MS 1500V (375W)	193 (72.4 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	13-40	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	5°	165.501°	0.7 ft	1x1	95	95	35.6 kW
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	5°	165.501°	0.7 ft	1x1	98	98	36.8 kW

📍 Detailed Layout

