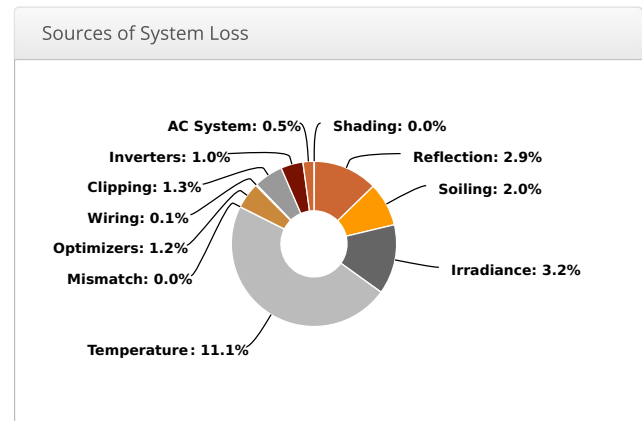
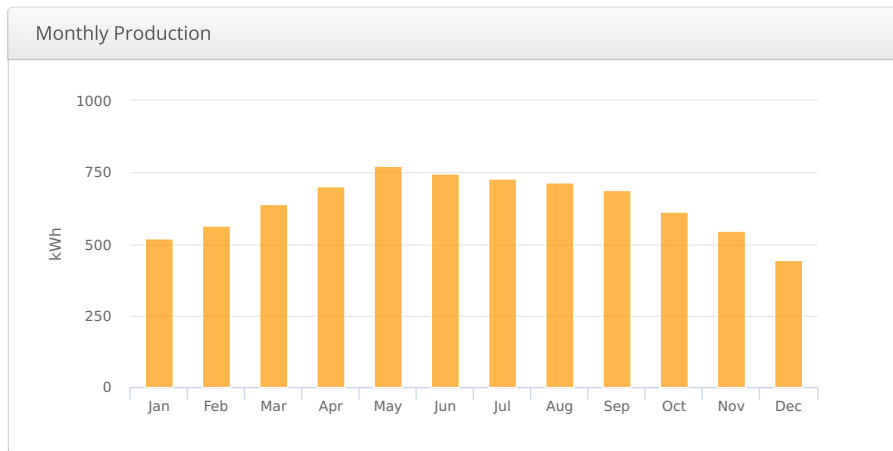
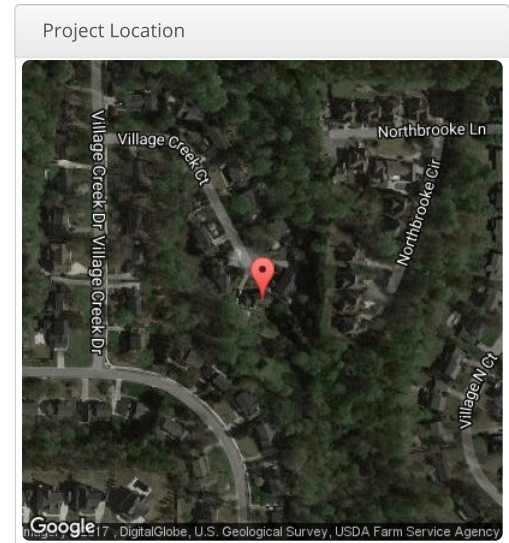


Design 1 Dunwoody Resident, Dunwoody, GA 30338

Report	
Project Name	Dunwoody Resident
Project Address	Dunwoody, GA 30338
Prepared By	Joseph Waybright joseph.waybright@hannahsolar.com

System Metrics	
Design	Design 1
Module DC Nameplate	5.22 kW
Inverter AC Nameplate	3.80 kW Load Ratio: 1.37
Annual Production	7.686 MWh
Performance Ratio	78.5%
kWh/kWp	1,472.5
Weather Dataset	TMY, 10km Grid (33.95,-84.35), NREL (prospector)
Simulator Version	8ec8e688e6-deec860572-cf45aff986-1ffea75a49



Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,667.9	
	POA Irradiance	1,875.2	12.4%
	Shaded Irradiance	1,874.8	0.0%
	Irradiance after Reflection	1,819.6	-2.9%
	Irradiance after Soiling	1,783.2	-2.0%
	Total Collector Irradiance	1,783.2	0.0%
Energy (kWh)	Nameplate	9,305.7	
	Output at Irradiance Levels	9,009.2	-3.2%
	Output at Cell Temperature Derate	8,010.1	-11.1%
	Output After Mismatch	8,010.1	0.0%
	Optimizer Output	7,914.0	-1.2%
	Optimal DC Output	7,909.9	-0.1%
	Constrained DC Output	7,804.0	-1.3%
	Inverter Output	7,725.1	-1.0%
	Energy to Grid	7,686.4	-0.5%
Temperature Metrics			
	Avg. Operating Ambient Temp		17.8 °C
	Avg. Operating Cell Temp		36.9 °C
Simulation Metrics			
	Operating Hours		4696
	Solved Hours		4696

Condition Set													
Description	Condition Set 1												
Weather Dataset	TMY, 10km Grid (33.95,-84.35), 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							
	East-West	-3.56		-0.075		3°C							
	Carport	-3.56		-0.075		3°C							
Soiling (%)	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					Characterization							
	Q.PLUS BFR-G4.1 290 (Hanwha)					Default Characterization, PAN							
Component Characterizations	Device						Characterization						
	SE3800H-US (SolarEdge)						Spec Sheet						
	P320 (SolarEdge)						Mfg Spec Sheet						

Components		
Component	Name	Count
Inverters	SE3800H-US (SolarEdge)	1 (3.80 kW)
Optimizers	P320 (SolarEdge)	18 (5.76 kW)
Module	Hanwha, Q.PLUS BFR-G4.1 290 (290W)	18 (5.22 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	9-21	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Flush Mount	Landscape (Horizontal)	25°	174.39303917908592°	0.0 ft	1x1	19	18	5.22 kW

Detailed Layout

