



## Western Sydney Solar & Electrical Site Report

<b>Report Name</b>	Test
<b>Report Date</b>	14/08/2010 12:02:04 PM
<b>Declination</b>	11d 50m
<b>Location</b>	Lat/Long specified
<b>Lat/Long</b>	-33.0 / 150.0
<b>Weather Station</b>	Richmond RAAF, NSW, Elevation: 20 Meters, (-33.600/150.783)
<b>Site Distance</b>	99 Kilometers
<b>Report Type</b>	PV
<b>Array Type</b>	Fixed Angle
<b>Tilt Angle</b>	20.00 deg
<b>Ideal Tilt Angle</b>	33.00 deg
<b>Azimuth</b>	336.90 deg
<b>Ideal Azimuth</b>	0.00 deg
<b>Electric Cost</b>	0.28 (\$/kWh)
<b>Module Make</b>	WINAICO
<b>Module Model</b>	WSP-300M6
<b>Module Type</b>	Standard
<b>Module Count</b>	16
<b>DC Rate (per module)</b>	300.0 Watts
<b>TSRF</b>	93.8%
<b>STC System Size</b>	4.80 kW
<b>DC System Size</b>	4.50 kW
<b>AC System Size</b>	3.56 kW
<b>Inverter Make</b>	ABB
<b>Inverter Model</b>	PVI-5000-OUTD-S-US-Z (240 V)
<b>Inverter Count</b>	1
<b>Inverter Efficiency</b>	96.5%
<b>System Loss Percentage</b>	18.0%
<b>AC Energy Efficiency</b>	94.6%
<b>Layout Configuration</b>	Custom
<b>Layout Point Count</b>	2

**Notes:** Some shading effect in winter months

Ridge capping has some cracks.



# Western Sydney Solar & Electrical System Picture Layout

Layout Type

Custom

Layout Point Count

2





## Western Sydney Solar & Electrical Summary Report

Solar Obstruction Data					
Month	Actual Shaded Solar Radiation Azimuth=336.9 Tilt=20.0 kWh/m <sup>2</sup> /day	Total Solar Resource Fraction (TSRF) Azimuth=336.9 Tilt=20.0	AC Energy Efficiency Azimuth=336.9 Tilt=20.0	Actual Shaded AC Energy (kWh) Azimuth=336.9 Tilt=20.0	PV Solar Cost Savings 0.28 (\$/kWh)
January	5.79	101.9%	103.6%	606.07	\$169.70
February	5.55	99.0%	100.1%	521.95	\$146.15
March	4.75	94.3%	95.5%	519.69	\$145.51
April	4.86	89.0%	90.2%	500.79	\$140.22
May	3.99	84.0%	84.6%	443.84	\$124.28
June	3.26	83.0%	83.0%	351.19	\$98.33
July	3.41	82.9%	83.0%	390.10	\$109.23
August	4.35	87.2%	87.9%	486.46	\$136.21
September	4.97	92.9%	93.9%	535.18	\$149.85
October	5.89	97.2%	98.1%	641.97	\$179.75
November	5.92	101.5%	103.3%	608.01	\$170.24
December	6.12	102.9%	104.8%	648.92	\$181.70
<b>Totals</b>	<b>58.86</b>	<b>93.8%</b>	<b>94.6%</b>	<b>6,254.17</b>	<b>\$1,751.17</b>
	<b>Effect: 93.8%</b>	<b>Unweighted</b>			
	<b>Sun Hrs: 4.91</b>	<b>Yearly Avg</b>			

Azimuth/Altitude Data											
Azimuth / Altitude (degrees) where South = 180 degrees											
55	9.0	100	10.5	<b>60 (ENE)</b>	<b>9.5</b>	105	10.0	65	9.5	110	11.0
70	9.0	115	4.0	75	10.5	<b>120 (ESE)</b>	<b>5.5</b>	80	13.0	125	0.0
85	12.0			<b>90 (E)</b>	<b>12.0</b>			95	11.5		

**Notes:** Some shading effect in winter months

Ridge capping has some cracks.



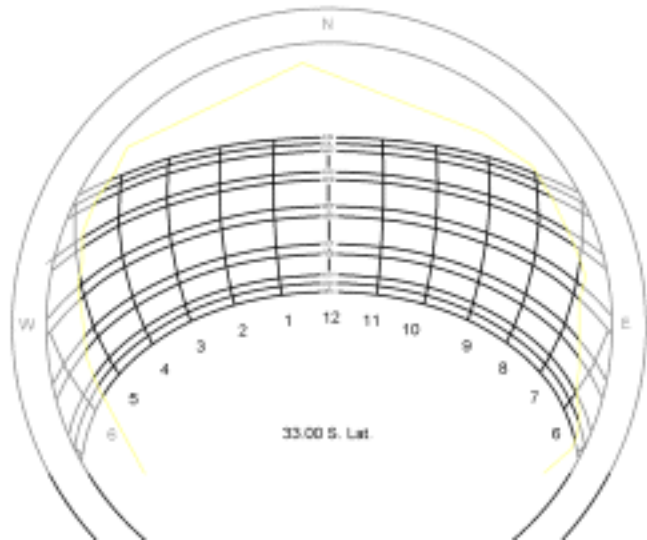
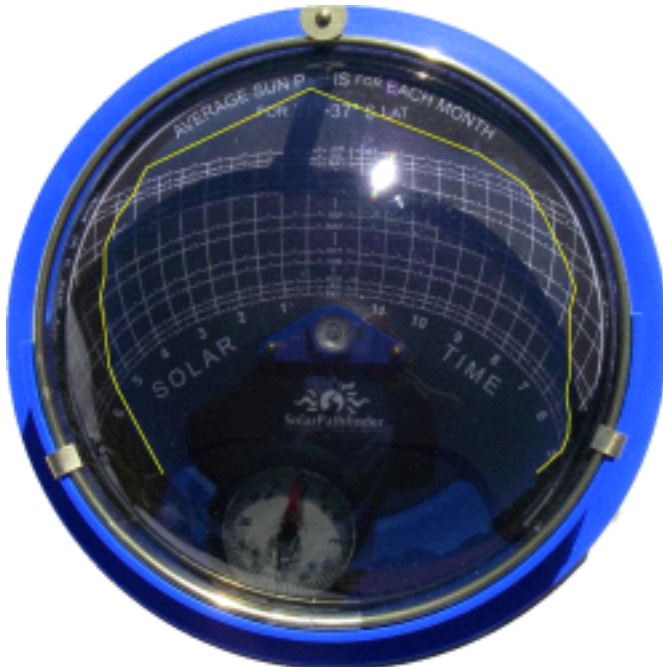
# Western Sydney Solar & Electrical Solar Site Analysis Report

Image File: "IMG3152.JPG"

Layout Point: 1

Solar Obstruction Data						
Month	Actual Shaded Solar Radiation Azimuth=336.9 Tilt=20.0 kWh/m <sup>2</sup> /day	Total Solar Resource Fraction (TSRF) Azimuth=336.9 Tilt=20.0	AC Energy Efficiency Azimuth=336.9 Tilt=20.0	Actual Shaded AC Energy (kWh) Azimuth=336.9 Tilt=20.0	PV Solar Cost Savings 0.28 (\$/kWh)	
January	5.79	101.9%	103.6%	606.07	\$169.70	
February	5.54	98.8%	100.0%	521.19	\$145.93	
March	4.76	94.5%	95.6%	520.14	\$145.64	
April	4.85	88.9%	90.1%	500.27	\$140.07	
May	3.99	84.0%	84.6%	443.84	\$124.28	
June	3.24	82.6%	82.8%	350.59	\$98.17	
July	3.41	82.8%	83.0%	390.01	\$109.20	
August	4.33	86.8%	87.5%	484.36	\$135.62	
September	5.01	93.5%	94.3%	537.43	\$150.48	
October	5.85	96.7%	97.7%	639.12	\$178.95	
November	5.92	101.5%	103.3%	608.01	\$170.24	
December	6.12	102.9%	104.8%	648.92	\$181.70	
<b>Totals</b>	<b>58.81</b>	<b>93.7%</b>	<b>94.6%</b>	<b>6,249.93</b>	<b>\$1,749.98</b>	
	<b>Effect: 93.7%</b>	<b>Unweighted</b>				
	<b>Sun Hrs: 4.90</b>	<b>Yearly Avg</b>				

Azimuth/Altitude Data											
Azimuth / Altitude (degrees) where South = 180 degrees											
55	9.0	100	10.5	<b>60 (ENE)</b>	<b>9.5</b>	105	10.0	65	9.5	110	6.0
70	9.0	115	4.0	75	8.5	<b>120 (ESE)</b>	<b>5.5</b>	80	8.0	125	0.0
85	11.5			<b>90 (E)</b>	<b>12.0</b>			95	11.5		





# Western Sydney Solar & Electrical Solar Site Analysis Report

Image File: "IMG3153.JPG"

Layout Point: 2

Solar Obstruction Data						
Month	Actual Shaded Solar Radiation Azimuth=336.9 Tilt=20.0 kWh/m <sup>2</sup> /day	Total Solar Resource Fraction (TSRF) Azimuth=336.9 Tilt=20.0	AC Energy Efficiency Azimuth=336.9 Tilt=20.0	Actual Shaded AC Energy (kWh) Azimuth=336.9 Tilt=20.0	PV Solar Cost Savings 0.28 (\$/kWh)	
January	5.79	101.9%	103.6%	606.07	\$169.70	
February	5.56	99.2%	100.3%	522.71	\$146.36	
March	4.74	94.2%	95.5%	519.24	\$145.39	
April	4.86	89.1%	90.3%	501.32	\$140.37	
May	3.99	83.9%	84.6%	443.84	\$124.28	
June	3.28	83.5%	83.1%	351.80	\$98.50	
July	3.41	82.9%	83.0%	390.18	\$109.25	
August	4.37	87.7%	88.3%	488.57	\$136.80	
September	4.94	92.3%	93.5%	532.93	\$149.22	
October	5.93	97.8%	98.6%	644.83	\$180.55	
November	5.92	101.5%	103.3%	608.01	\$170.24	
December	6.12	102.9%	104.8%	648.92	\$181.70	
<b>Totals</b>	<b>58.91</b>	<b>93.9%</b>	<b>94.7%</b>	<b>6,258.40</b>	<b>\$1,752.35</b>	
	<b>Effect: 93.9%</b>	<b>Unweighted</b>				
	<b>Sun Hrs: 4.91</b>	<b>Yearly Avg</b>				

Azimuth/Altitude Data											
Azimuth / Altitude (degrees) where South = 180 degrees											
55	7.0	100	4.0	<b>60 (ENE)</b>	<b>9.5</b>	105	6.5	65	7.5	110	11.0
70	4.5	115	3.0	75	10.5	<b>120 (ESE)</b>	<b>3.0</b>	80	13.0	125	0.0
85	12.0			<b>90 (E)</b>	<b>9.0</b>			95	6.5		

