



Small Town Solar Site Report

Report Name	John Smith
Report Date	6/16/2016
Declination	-2d 48m
Location	Linden, TN 37096
Lat/Long	35.598 / -87.852
Weather Station	Jackson-McKellar Sipes Rgnl AP, TN, Elevation: 433 Feet, (35.600 / -88.917)
Site Distance	60 Miles
Report Type	Ecological
Array Type	Fixed Angle
Tilt Angle	0.00 deg
Ideal Tilt Angle	35.60 deg
Azimuth	180.00 deg
Ideal Azimuth	180.00 deg
Layout Configuration	Four Corner
Layout Point Count	4

Notes: This is an ecological report created in the SolarPathfinder Assistant 5

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Small Town Solar System Picture Layout

Layout Type Four Corner
Layout Point Count 4





Small Town Solar Summary Report

Solar Obstruction Data

Month	Unshaded % of Ideal Site Azimuth=180 Tilt=35.6	Ideal Unshaded Solar Radiation Azimuth=180.0 Tilt=35.6 kWh/m ² /day	Actual Unshaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Actual Shaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Unshaded % of Actual Site Azimuth=180.0 Tilt=0.0	Total Solar Resource Fraction (TSRF) (Actual vs Ideal)	Ideal Site Efficiency Azimuth=180.0 Tilt=35.6
January	51.4 %	2.98	2.03	1.03	50.9 %	34.7 %	49.5 %
February	73.4 %	3.34	2.56	1.87	73.1 %	56.0 %	72.2 %
March	95.1 %	5.32	4.39	4.16	94.8 %	78.3 %	95.0 %
April	97.6 %	5.00	4.85	4.73	97.4 %	94.5 %	97.9 %
May	98.4 %	5.90	6.29	6.18	98.4 %	104.9 %	98.9 %
June	98.1 %	5.41	5.99	5.87	98.1 %	108.6 %	98.6 %
July	98.2 %	5.93	6.42	6.31	98.2 %	106.3 %	98.7 %
August	97.7 %	5.54	5.52	5.39	97.6 %	97.2 %	98.1 %
September	95.6 %	5.81	5.01	4.77	95.1 %	82.0 %	95.5 %
October	80.1 %	4.95	3.69	2.92	79.2 %	59.0 %	79.0 %
November	55.5 %	3.57	2.38	1.30	54.6 %	36.4 %	53.5 %
December	35.9 %	2.63	1.69	0.60	35.2 %	22.7 %	34.1 %
Totals	81.4 % Unweighted Yearly Avg	56.39 Effect: 100.0 % Sun Hrs: 4.70	50.83 Effect: 90.1 % Sun Hrs: 4.24	45.13 Effect: 80.1 % Sun Hrs: 3.76	88.8 % Unweighted Yearly Avg	80.0 % Unweighted Yearly Avg	86.1 % Unweighted Yearly Avg

Azimuth/Altitude Data

Azimuth / Altitude (degrees) where North = 0 degrees											
55	11.0	100	24.5	145	42.5	190	47.5	235	33.0	280	19.5
60 (ENE)	12.0	105	27.5	150 (SSE)	44.0	195	45.0	240 (WSW)	23.0	285	20.0
65	17.5	110	22.5	155	45.0	200	32.5	245	21.5	290	19.0
70	17.0	115	23.0	160	45.0	205	27.0	250	23.0	295	18.5
75	19.5	120 (ESE)	25.0	165	43.5	210 (SSW)	28.5	255	24.0	300 (WNW)	16.0
80	12.0	125	26.5	170	43.0	215	30.5	260	23.0	305	16.5
85	20.0	130	35.0	175	42.5	220	32.5	265	20.0		
90 (E)	28.0	135 (SE)	37.5	180 (S)	45.0	225 (SW)	32.0	270 (W)	17.5		
95	25.5	140	40.5	185	47.0	230	34.0	275	17.5		

Deciduous Calculation Data

Transparency: 50 %

Months with no leaves: October through April

Notes: This is a ecological report created in the SolarPathfinder Assistant 5

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Small Town Solar Solar Site Analysis Report

Layout Point 4

Image File: SampleImage4.jpg

Solar Obstruction Data

Month	Unshaded % of Ideal Site Azimuth=180 Tilt=35.6	Ideal Unshaded Solar Radiation Azimuth=180.0 Tilt=35.6 kWh/m ² /day	Actual Unshaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Actual Shaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Unshaded % of Actual Site Azimuth=180.0 Tilt=0.0	Total Solar Resource Fraction (TSRF) (Actual vs Ideal)	Ideal Site Efficiency Azimuth=180.0 Tilt=35.6
January	54.7 %	2.98	2.03	1.10	54.2 %	36.9 %	52.6 %
February	82.3 %	3.34	2.56	2.10	82.1 %	62.8 %	81.2 %
March	95.8 %	5.32	4.39	4.19	95.5 %	78.9 %	95.6 %
April	99.4 %	5.00	4.85	4.83	99.4 %	96.4 %	99.6 %
May	99.2 %	5.90	6.29	6.23	99.2 %	105.7 %	99.4 %
June	98.9 %	5.41	5.99	5.92	98.9 %	109.5 %	99.2 %
July	99.0 %	5.93	6.42	6.36	99.0 %	107.3 %	99.3 %
August	99.2 %	5.54	5.52	5.48	99.2 %	98.8 %	99.4 %
September	98.8 %	5.81	5.01	4.95	98.7 %	85.1 %	98.9 %
October	88.3 %	4.95	3.69	3.23	87.4 %	65.1 %	87.2 %
November	61.6 %	3.57	2.38	1.45	60.7 %	40.5 %	59.4 %
December	42.7 %	2.63	1.69	0.70	41.6 %	26.8 %	40.2 %
Totals	85.0 % Unweighted Yearly Avg	56.39 Effect: 100% Sun Hrs: 4.70	50.83 Effect: 90.1 % Sun Hrs: 4.24	46.53 Effect: 82.5 % Sun Hrs: 3.88	91.6 % Unweighted Yearly Avg	82.5 % Unweighted Yearly Avg	89.1 % Unweighted Yearly Avg

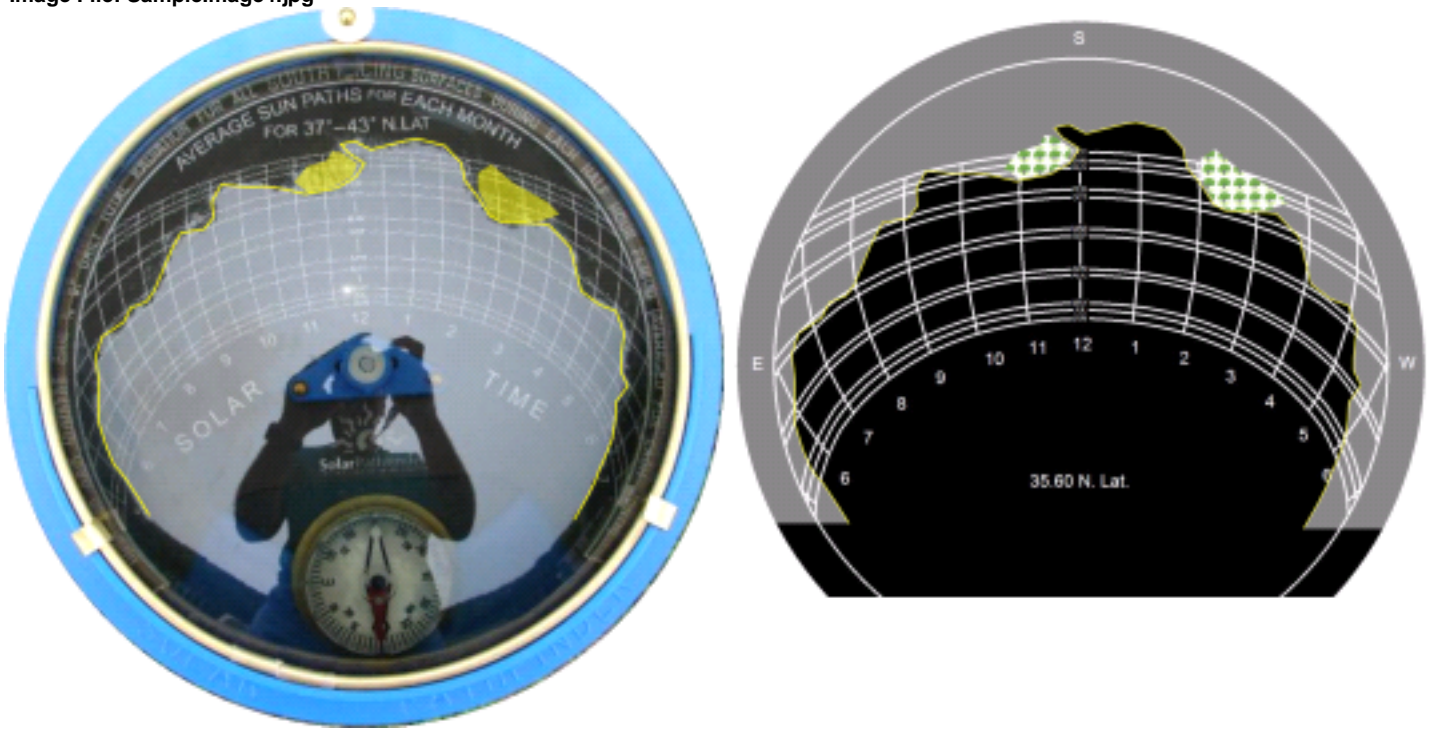
Azimuth/Altitude Data

Azimuth / Altitude (degrees) where North = 0 degrees											
55	0.0	100	14.5	145	24.5	190	21.5	235	20.0	280	12.0
60 (ENE)	9.0	105	19.0	150 (SSE)	28.5	195	20.0	240 (WSW)	19.0	285	11.5
65	8.0	110	22.5	155	32.0	200	20.0	245	20.5	290	11.5
70	6.0	115	23.0	160	36.0	205	23.0	250	21.5	295	11.5
75	5.5	120 (ESE)	22.5	165	36.5	210 (SSW)	28.5	255	17.0	300 (WNW)	11.0
80	5.5	125	21.5	170	37.0	215	30.5	260	10.5	305	10.5
85	7.0	130	26.5	175	35.0	220	32.5	265	10.5		
90 (E)	6.5	135 (SE)	25.5	180 (S)	24.5	225 (SW)	30.0	270 (W)	12.0		
95	7.0	140	21.0	185	24.0	230	23.5	275	9.5		

Small Town Solar Solar Site Analysis Report

Layout Point 4

Image File: SampleImage4.jpg



Notes: [None]



Small Town Solar Solar Site Analysis Report

Layout Point 1

Image File: SampleImage1.jpg

Solar Obstruction Data

Month	Unshaded % of Ideal Site Azimuth=180 Tilt=35.6	Ideal Unshaded Solar Radiation Azimuth=180.0 Tilt=35.6 kWh/m ² /day	Actual Unshaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Actual Shaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Unshaded % of Actual Site Azimuth=180.0 Tilt=0.0	Total Solar Resource Fraction (TSRF) (Actual vs Ideal)	Ideal Site Efficiency Azimuth=180.0 Tilt=35.6
January	53.6 %	2.98	2.03	1.07	52.9 %	36.0 %	51.4 %
February	77.7 %	3.34	2.56	1.97	77.1 %	59.0 %	76.0 %
March	94.5 %	5.32	4.39	4.13	94.1 %	77.7 %	94.3 %
April	98.5 %	5.00	4.85	4.77	98.3 %	95.4 %	98.8 %
May	97.7 %	5.90	6.29	6.13	97.5 %	103.9 %	98.2 %
June	97.4 %	5.41	5.99	5.83	97.3 %	107.8 %	98.0 %
July	97.4 %	5.93	6.42	6.25	97.3 %	105.4 %	98.1 %
August	99.0 %	5.54	5.52	5.46	98.9 %	98.5 %	99.2 %
September	93.6 %	5.81	5.01	4.64	92.5 %	79.8 %	93.0 %
October	85.6 %	4.95	3.69	3.09	83.8 %	62.4 %	83.7 %
November	54.2 %	3.57	2.38	1.25	52.3 %	34.9 %	51.5 %
December	42.2 %	2.63	1.69	0.69	40.7 %	26.3 %	39.9 %
Totals	82.6 % Unweighted Yearly Avg	56.39 Effect: 100% Sun Hrs: 4.70	50.83 Effect: 90.1 % Sun Hrs: 4.24	45.28 Effect: 80.3 % Sun Hrs: 3.77	89.1 % Unweighted Yearly Avg	80.3 % Unweighted Yearly Avg	86.7 % Unweighted Yearly Avg

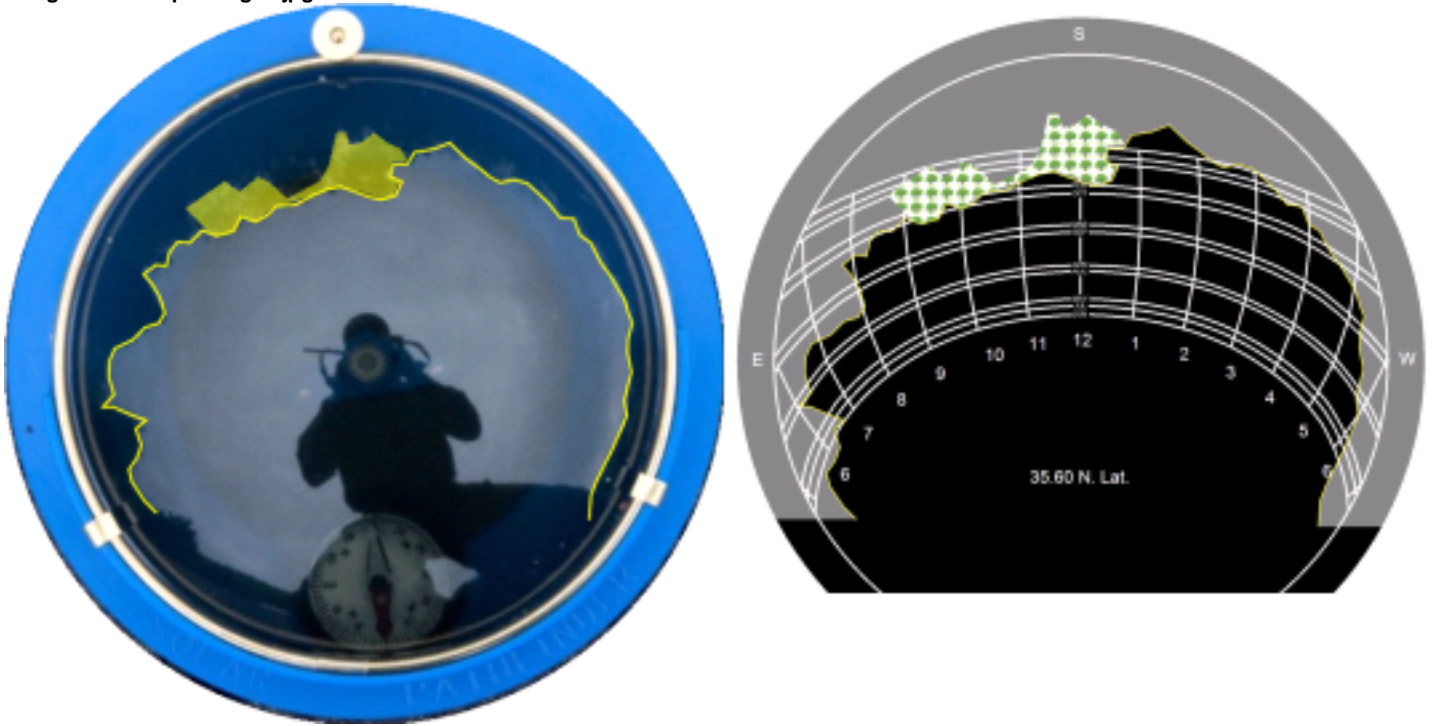
Azimuth/Altitude Data

Azimuth / Altitude (degrees) where North = 0 degrees											
55	11.0	100	24.5	145	37.5	190	38.5	235	13.0	280	9.0
60 (ENE)	9.5	105	27.5	150 (SSE)	36.5	195	24.0	240 (WSW)	13.5	285	9.5
65	9.5	110	22.0	155	38.5	200	19.5	245	12.0	290	10.5
70	17.0	115	20.0	160	38.5	205	21.5	250	10.5	295	11.0
75	19.5	120 (ESE)	22.5	165	37.5	210 (SSW)	22.5	255	8.5	300 (WNW)	10.5
80	12.0	125	26.5	170	37.5	215	23.0	260	7.5	305	6.0
85	11.5	130	30.5	175	39.0	220	18.0	265	9.0		
90 (E)	11.0	135 (SE)	34.5	180 (S)	41.0	225 (SW)	17.0	270 (W)	9.0		
95	17.0	140	33.5	185	42.0	230	16.5	275	9.5		

Small Town Solar Solar Site Analysis Report

Layout Point 1

Image File: SampleImage1.jpg



Notes: [None]



Small Town Solar Solar Site Analysis Report

Layout Point 2

Image File: SampleImage2.jpg

Solar Obstruction Data

Month	Unshaded % of Ideal Site Azimuth=180 Tilt=35.6	Ideal Unshaded Solar Radiation Azimuth=180.0 Tilt=35.6 kWh/m ² /day	Actual Unshaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Actual Shaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Unshaded % of Actual Site Azimuth=180.0 Tilt=0.0	Total Solar Resource Fraction (TSRF) (Actual vs Ideal)	Ideal Site Efficiency Azimuth=180.0 Tilt=35.6
January	47.7 %	2.98	2.03	0.96	47.3 %	32.2 %	46.0 %
February	56.6 %	3.34	2.56	1.44	56.2 %	43.0 %	55.1 %
March	97.8 %	5.32	4.39	4.29	97.6 %	80.6 %	97.7 %
April	94.3 %	5.00	4.85	4.55	93.7 %	90.9 %	94.7 %
May	99.2 %	5.90	6.29	6.23	99.1 %	105.7 %	99.4 %
June	98.6 %	5.41	5.99	5.90	98.6 %	109.1 %	98.9 %
July	99.0 %	5.93	6.42	6.36	99.0 %	107.3 %	99.3 %
August	94.3 %	5.54	5.52	5.19	93.9 %	93.5 %	95.0 %
September	97.0 %	5.81	5.01	4.83	96.4 %	83.1 %	96.8 %
October	66.5 %	4.95	3.69	2.39	64.7 %	48.2 %	64.7 %
November	49.0 %	3.57	2.38	1.15	48.2 %	32.1 %	47.2 %
December	34.4 %	2.63	1.69	0.58	34.1 %	21.9 %	32.7 %
Totals	77.9 % Unweighted Yearly Avg	56.39 Effect: 100% Sun Hrs: 4.70	50.83 Effect: 90.1 % Sun Hrs: 4.24	43.85 Effect: 77.8 % Sun Hrs: 3.65	86.3 % Unweighted Yearly Avg	77.8 % Unweighted Yearly Avg	83.1 % Unweighted Yearly Avg

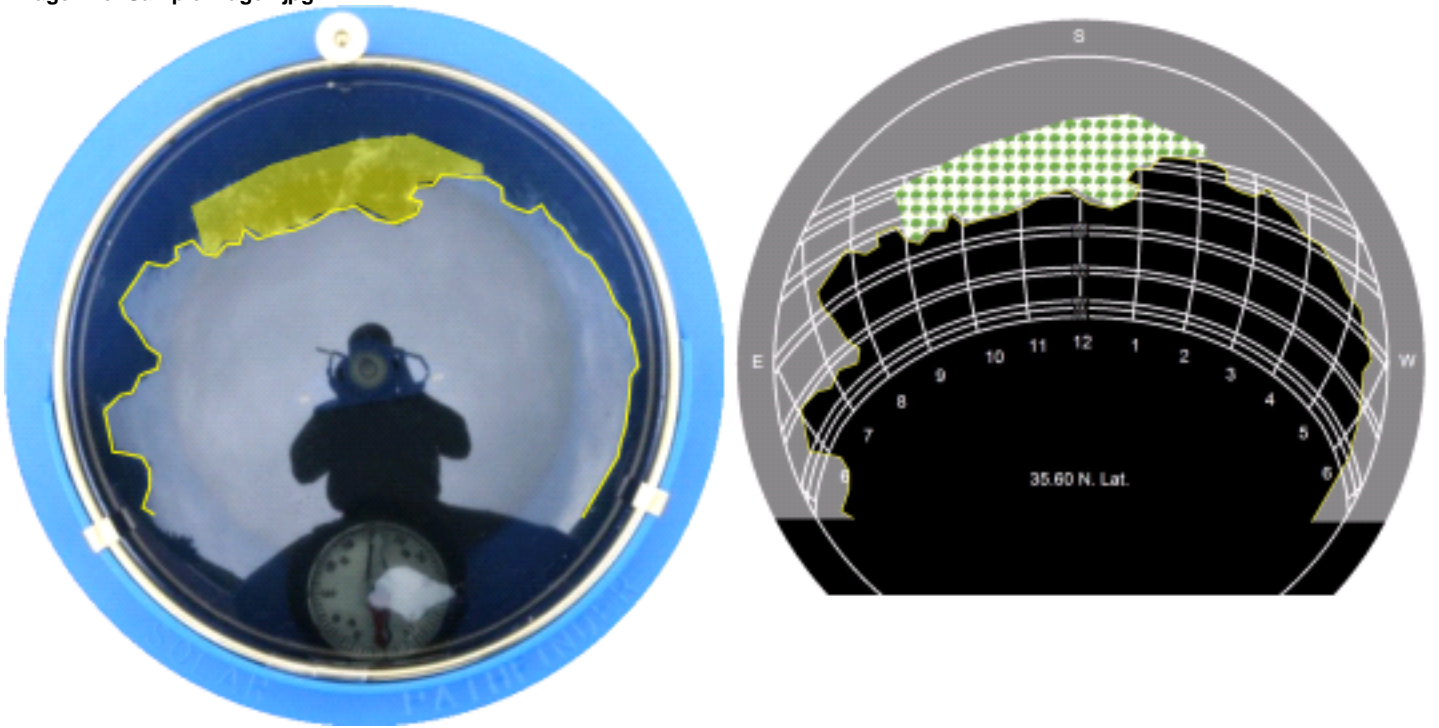
Azimuth/Altitude Data

Azimuth / Altitude (degrees) where North = 0 degrees											
55	0.0	100	19.5	145	42.5	190	47.5	235	17.0	280	8.0
60 (ENE)	12.0	105	11.5	150 (SSE)	44.0	195	45.0	240 (WSW)	17.0	285	8.0
65	17.5	110	14.5	155	45.0	200	32.5	245	13.5	290	8.0
70	13.0	115	16.0	160	45.0	205	27.0	250	12.0	295	9.0
75	8.0	120 (ESE)	25.0	165	43.5	210 (SSW)	24.5	255	11.0	300 (WNW)	9.5
80	8.0	125	25.0	170	43.0	215	22.5	260	7.5	305	0.0
85	20.0	130	35.0	175	42.5	220	25.5	265	7.0		
90 (E)	28.0	135 (SE)	37.5	180 (S)	45.0	225 (SW)	23.5	270 (W)	6.0		
95	25.5	140	40.5	185	47.0	230	18.5	275	8.5		

Small Town Solar Solar Site Analysis Report

Layout Point 2

Image File: SampleImage2.jpg



Notes: [None]



Small Town Solar Solar Site Analysis Report

Layout Point 3

Image File: SampleImage3.jpg

Solar Obstruction Data

Month	Unshaded % of Ideal Site Azimuth=180 Tilt=35.6	Ideal Unshaded Solar Radiation Azimuth=180.0 Tilt=35.6 kWh/m ² /day	Actual Unshaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Actual Shaded Solar Radiation Azimuth=180.0 Tilt=0.0 kWh/m ² /day	Unshaded % of Actual Site Azimuth=180.0 Tilt=0.0	Total Solar Resource Fraction (TSRF) (Actual vs Ideal)	Ideal Site Efficiency Azimuth=180.0 Tilt=35.6
January	49.7 %	2.98	2.03	1.00	49.4 %	33.6 %	47.9 %
February	77.2 %	3.34	2.56	1.97	77.2 %	59.0 %	76.5 %
March	92.2 %	5.32	4.39	4.05	92.1 %	76.1 %	92.4 %
April	98.1 %	5.00	4.85	4.77	98.3 %	95.4 %	98.7 %
May	97.6 %	5.90	6.29	6.14	97.7 %	104.2 %	98.5 %
June	97.4 %	5.41	5.99	5.85	97.6 %	108.1 %	98.3 %
July	97.2 %	5.93	6.42	6.25	97.4 %	105.4 %	98.1 %
August	98.3 %	5.54	5.52	5.43	98.3 %	98.0 %	98.8 %
September	93.0 %	5.81	5.01	4.65	92.8 %	80.1 %	93.5 %
October	80.0 %	4.95	3.69	2.98	80.8 %	60.1 %	80.4 %
November	57.1 %	3.57	2.38	1.36	57.1 %	38.1 %	56.0 %
December	24.2 %	2.63	1.69	0.41	24.4 %	15.7 %	23.4 %
Totals	80.2 % Unweighted Yearly Avg	56.39 Effect: 100% Sun Hrs: 4.70	50.83 Effect: 90.1 % Sun Hrs: 4.24	44.87 Effect: 79.6 % Sun Hrs: 3.74	88.3 % Unweighted Yearly Avg	79.6 % Unweighted Yearly Avg	85.6 % Unweighted Yearly Avg

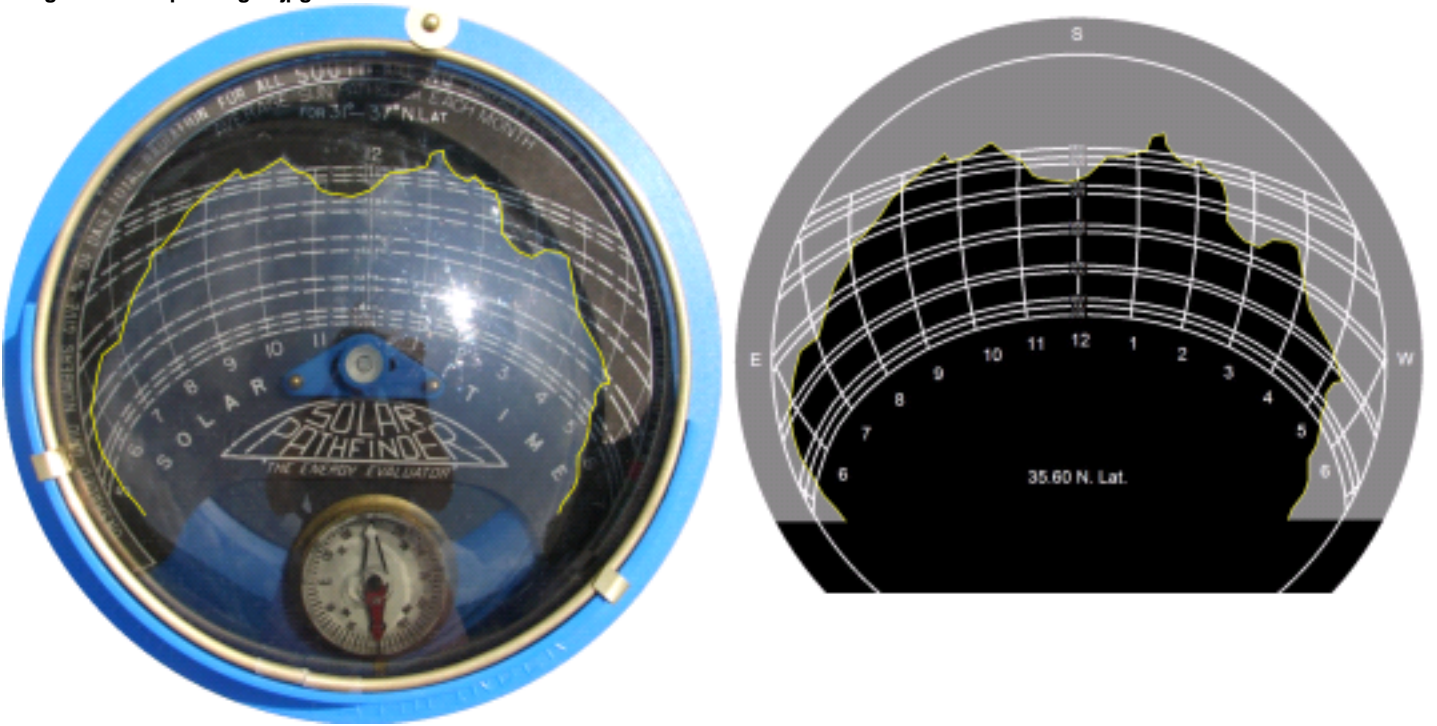
Azimuth/Altitude Data

Azimuth / Altitude (degrees) where North = 0 degrees											
55	0.0	100	16.5	145	21.0	190	32.5	235	33.0	280	19.5
60 (ENE)	7.0	105	17.5	150 (SSE)	24.5	195	30.5	240 (WSW)	23.0	285	20.0
65	6.0	110	18.5	155	24.5	200	22.5	245	21.5	290	19.0
70	4.5	115	19.5	160	28.0	205	27.0	250	23.0	295	18.5
75	4.0	120 (ESE)	20.0	165	35.0	210 (SSW)	27.0	255	24.0	300 (WNW)	16.0
80	4.5	125	21.0	170	39.5	215	26.0	260	23.0	305	16.5
85	6.5	130	20.5	175	40.5	220	27.5	265	20.0		
90 (E)	8.5	135 (SE)	21.0	180 (S)	40.0	225 (SW)	32.0	270 (W)	17.5		
95	15.0	140	21.0	185	36.5	230	34.0	275	17.5		

Small Town Solar Solar Site Analysis Report

Layout Point 3

Image File: SampleImage3.jpg



Notes: [None]