

Solar Air Conditioning Energy Comparison  
Field Evaluation

(COMPANY REGISTRATION No. 761587-V)

**RESULTS**

**LOT 263**

**Real Time Logging**

**Reading Differentiate U.S. Brand AC against Sedna System (18,000 Btu)**

	<b>Ampere Avg.</b>	<b>KW Avg.</b>	<b>Off Coil °c</b>	<b>Rm Temp °c</b>	<b>Humidity</b>
U.S. Brand	10.95	1.88	10.2	23	50-64%
Sedna Aire	5.27	1.17	11.8	23	58-65%
Total Saving	51%				

**6 Days Logging**

	<b>Ampere Avg.</b>	<b>KW Avg.</b>	<b>Suction</b>	<b>Discharge</b>	<b>Off Coil °c</b>	<b>Rm Temp °c</b>
U.S. Brand	7.36	1.53	65	260	10.2	23
Sedna Aire	4.53	1.13	68	260	11.8	23
Total Saving	38%					

**LOT 66**

**Reading Differentiate Korea against Sedna System (12,000 Btu)**

	<b>Ampere Avg.</b>	<b>KW Avg.</b>	<b>Off Coil °c</b>	<b>Rm Temp °c</b>	<b>Humidity</b>
Korea Brand	5.47	1.23	13.5	25	Unavailable
Sedna Aire	4.21	0.85	12.5	22.3	52-65%
Total Saving	23%				

**LOT 211**

**Real Time Logging**

**Reading Differentiate Japan against Sedna System (18,000 Btu)**

	<b>Ampere Avg.</b>	<b>KW Avg.</b>	<b>Off Coil °c</b>	<b>Rm Temp °c</b>	<b>Humidity</b>
Japan Brand	8.10	1.88	12.8	25	35-75%
Sedna Aire	5.23	1.10	11.8	22.5	45-65%
Total Saving	35%				

### 3 Days Logging

	<b>Ampere Avg.</b>	<b>KW Avg.</b>	<b>Suction</b>	<b>Discharge</b>	<b>Off Coil °c</b>	<b>Rm Temp °c</b>
Japan Brand	7.85	1.77	65	260	12.8	25
Sedna Aire	5.65	1.24	60	246	10.7	23
Total Saving	28%					

### CONCLUSION

Given the results of the testing, we will derive the average consumption for all replaced units in terms of kilowatts as follows:

$$\frac{1.53 + 1.23 + 1.88 + 1.77}{4} = 1.60 \text{ KW}$$

And Sedna Aire's average kilowatt consumption for the installed units is:

$$\frac{1.13 + 0.85 + 1.10 + 1.24}{4} = 1.08 \text{ KW}$$

The total average savings in percent is **32%**.

In all, if the U.S. Navy were to replace all their air conditioning units with Solar A/C, the whole facility will be able to save **32%** in operating costs for air conditioning alone.