

## POWER FACTOR CORRECTION UNIT TEST

Date: 12/14/07  
Location: Richmond Cold Storage -Chester Facility  
Subject Equipment: Chiller  
Test Equipment: E-Mon/D-Mon Utility Grade electric Kwh/KW Sub-meter  
and Amprob DP -30 meter  
Custom Built Power Factor Correction (PFC) Unit by V-Blox

### SCOPE OF TEST:

Using the above named Subject Equipment, a test will be performed showing the KW electrical savings on the electrical circuit using the mentioned test equipment. A Custom Built V-Blox PFC was specifically built for the subject equipment. The electrical Kwh/KW meter will be installed at the Subject test equipment, therefore a higher KW savings can be assumed overall due to the electrical line loss savings that WILL NOT be seen with this test protocol. The test will be performed as follows:

1. Real Time KW, Power Factor, Amperage, and Voltage readings will be taken prior to connection of the PFC unit and after the connection of the PFC unit.
2. All readings will be recorded and verified by "Third Party" representatives and will be classified into two categories for test purposes - Initial readings and Optimized readings will be WITHOUT the PFC unit connected and optimized readings will be WITH the PFC unit connected.

#### INITIAL READINGS

Voltage = 283.0  
Phase A Amps = 85  
Phase B Amps = 87  
Phase C Amps = 81  
Real Time KW = 46.6  
Power Factor = .66

#### OPTIMIZED READINGS

Voltage = 283.9  
Phase A Amps = 65  
Phase B Amps = 67.7  
Phase C Amps = 62  
Real Time KW = 41.0  
Power Factor = .86

### RESULTS

23.3 % Improvement in Power factor at the load

23.0 % Reduction in Line Current

12.0 % Reduction in Line KW

**WITNESSES:** In signing as a witness to the above test and recorded documentation, I hereby swear that all information listed above is true and correct and was verified real time in person:

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Pat Hughes -Director RCS- Chester

Ken Jezek  
Ken Jezek - Director V-Blox Carolinas

Dick Dowdell  
Dick Dowdell - VP of Engineering RCS

Andy Shulick  
Andy Shulick - President  
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