## Interpretation IC 72-2005-3 of ANSI/ASHRAE Standard 72-2005 Method of Testing Commercial Refrigerators and Freezers

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**<u>Request from:</u>** Steven Cousins (<u>stcousins@na.ko.com</u>), The Coca-Cola Company, One Coca-Cola Plaza, Atlanta, GA 30313.

**<u>Reference</u>**: This request for interpretation refers to the requirements in ANSI/ASHRAE Standard 72-2005, Section1, regarding application of the standard and end use of the commercial refrigerator or freezer.

**Background:** In the trade (stores, businesses, industrial locations), commercial refrigerators are operated in a variety of ways and under a variety of conditions. Ambient temperatures and humidities are transient, voltage levels fluctuate, loading patterns are dynamic, etc. But Standard 72-2005 does not state that it is for field use; the standard states that it is for testing. The standard states that it is for the purpose of identifying a method of testing for comparative evaluation of performance issues. If indeed the purpose of the standard is to perscribe a uniform method of testing, then doesn't that mean that the standard is written so that commercial refrigerators are operated under test in such a fashion, that certain fixed conditions enable a common repetitive means for rating performance comparison... and not to dictate how the commercial refrigerator is to be used outside of testing nor dictate preferences by the operator or customer?

The purpose of the standard is not to dictate to stores, restaurants, or commercial users what the specific temperature setpoint must be in operation for every application and every end use, nor dictate the exact moments of when the door is to be opened in the trade and for how long. The end user may need to use the commercial refrigerator in such a manner where the machine is accessed frequently, or the machine must run colder or warmer. The standard is for test comparison, and is not a definition for field use. As long as the commercial refrigerators are tested in accordance with the prescribed methodology of the standard, and the results of these standard tests are not compared to field results of the trade, the results of the standard are good. The results of the tests of the standard are good and valid, regardless of how the commercial refrigerator is used in the trade or what is done to the machine in the field regarding enabling or disabling features. The standard is not an attempt to dictate what features of the commercial refrigerator can or cannot be used in the trade. And the standard is not to dictate how the machine is to be loaded in the trade in order for the results of the standard test to be applicable and valid. To force the standard as a means of restricting how a commercial refrigerator is to be used in the trade is a misapplication of the standard, and goes beyond the stated purpose of the standard.

**Interpretation No. 1:** The purpose of Standard 72 is to provide a uniform method of test for comparative evaluations, and not for comparisons of the differing variety of practical and necessary ways open and closed commercial refrigerators and freezers are used in the field.

Question No. 1: Is this interpretation correct?

## Answer No. 1: Yes

**<u>Comments</u>**: Units can be tested under a wide range of conditions using the test method. Knowing the conditions is a requirement to know how to apply the results.

**Interpretation No. 2:** Results obtained using the uniform method of test prescribed in Standard 72 should not be compared to any results that might be obtained in actual use in the field that do not conform to the prescribed uniform method.

Question No. 2: Is this interpretation correct?

<u>Answer No. 2:</u> Yes, the results are not comparable unless the field conditions are the same as the test conditions prescribed under the standard.

**<u>Comments</u>**: The test standard gives a result that can be applied by the individual reviewing the data however one chooses. If the test conditions are similar to field conditions there may be correlations.

**Interpretation No. 3:** The results of the tests of the standard are good and valid, regardless of how the commercial refrigerator is used in the trade or what is done to the machine in the field in enabling or disabling features, provided that the test results are applied to machines comparatively tested by the standard.

Question No. 3: Is this interpretation correct?

Answer No. 3: Yes, the results are valid only for the test conditions applied to the unit.

**<u>Comments</u>**: Field conditions and features vary and can give different results under conditions other than the conditions prescribed by the standard.

**Interpretation No. 4:** Standard 72 is not intended to be used as a means of dictating the use of the commercial refrigerator or freezer in the trade.

Question No. 4: Is this interpretation correct?

## Answer No. 4: Yes

**<u>Comments</u>**: Standard 72 is a standard method of test. It dictates how the unit is tested under controlled conditions to give energy consumption data. The standard does not mandate how the equipment is to be applied in the field. The objective of the test data is to give a method of comparison for different units, under standardized conditions.