

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
ENGINEERS, INC.**

**1791 Tullie Circle, N.E./Atlanta, GA 30329
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SPC MINUTES COVER SHEET

(Minutes of all TC/TG/TRG Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/TRG NO SPC 127-2007R DATE 1/26/2010

TC/TG/TRG TITLE Revision of Standard 127-2007R, Method of Testing for Rating Computer and Data Processing Room Unitary Air-Conditioners

DATE OF MEETING 1/26/2010 LOCATION Orlando Conference

MEMBERS	Voting Member	PRESENT ABSENT	MEMBERS	Voting Member	PRESENT ABSENT
Fred Stack (Chair)	Y	P			
John Bean	Y	A	Geof Lawler	Y	P
Mark Hourican	Y	P	Greg Jeffers	Y	P
Terry Rodger	Y	P	David Quirk	Y	P
Mukesh Khattar	Y	P	Jeff Trower	Y	P
Davis Wilson		Nick Gangemi	Mark Seymour	Roger Schmidt	Sang Lee
Bob Blough		Don Beaty	Jack Glass	Tim McCann	

DISTRIBUTION

<i>All Members of TC/TG/TRG plus the following:</i>	
TAC Section Head:	Van Baxter
Standards Committee Liaison to SPC 127	Bill Dean

Final approved minutes.

Roster Voting Member Role Call

- Quorum present 7/1/1 (Present / Absent / Chair)

First meeting was very short with a prime purpose to insure all were aware of the rules of engagement of the group as well as to define our scope of responsibility.

Scope of Work discussed. No final decisions made.

- Implement the ASHRAE Staff Editorial feedback. The attached document is the current standard with the ASHRAE staff editorial feedback comments made and noted by a strike thru and or red color. Please review prior to next meeting
- Rename SCOP (it is currently used in another standard with a different definition. Yes we used it first, but the other standard is much more widely used, thus their definition has become more widely accepted.) Please send all suggestions to me and I will make them available prior to the next meeting.
- What new equipment technologies do we need to add. I have agreed with several of the IT OEM's that if the new technologies we elect to try and cover with a standard is intrusive on the IT hardware itself we will reach out to them as consultants. The flavor of the discussion was the group wants to try and incorporate as many technology approaches as possible. More discussion at the next meeting.
- Replace ASCOP with a new term and definition as requested by the 90.1 MSC. We discussed three options

- Delete it and do not replace it
- Replace it with a definition and calculation that is identical to that used in ASHRAE 360 for iEER. This more easily fits 90.1 and minimizes the potential for users to select non-precision cooling technologies for data center applications because of higher iEER values allowing the elimination of the economizer requirement. Note the 360 formulae is $iEER=(0.20*A)+(0.617*B)+(0.238*C)+(0.125*D)$. This does not accurately reflect the impact of changing ambient on efficiency for data center applications.
- Modify the 360 formulae to more accurately reflect the impact of changing ambient in data center applications.

More discussion to follow.

- Other. Two items were raised during the meeting and one after the meeting for consideration during this update process.
 - Change the primary return temperature set-point. Suggestions were 80 F, 80.6 F and 90 F. Requires further discussion
 - Provide some guidance or limitation for how much CFM is allowed for a given KW cooling capacity. Can or should this limit be tied back to the IT equipment demands?
 - Provide some guidance or limitation on the CW pressure drop allowed for the required 12 F delta t of the chilled water loop.

A = EER at 100% net capacity at AHRI standard rating conditions
B = EER at 75% net capacity at reduced ambient
C = EER at 50% net capacity at reduced ambient
D = EER at 25% net capacity at reduced ambient

Ambient °F formulae

- For % Load >44.4% OAT = .54*%Load+41
- For % Load ≤44.4 OAT = 65.0

See ASHRAE Standard 340/360-2007

- There was also discussion regarding the possibility that AHRI will begin certifying ratings on some of the equipment covered by this standard. It was agreed we should not let this potential event impact our efforts on advancing this standard.

After the meeting I came to the realization that the change in employment status of one of our voting members (now two from one firm) results in the need for one resignation from a voting position. It is hoped this individual will continue involvement with this sub-committee as his insight and knowledge are valued. This individual is a consulting engineer, so I am going to nominate as a replacement the only other consulting engineer that expressed interest by attending the meeting even though they did not have a voting position at the time.

The next several meetings will be via phone conference. They will be scheduled for 4:00 PM EST on the following Thursdays. They will be held to one hour. Please mark your calendars.

- February 11 and 22
- March 11 and 25
- April 8 and 22

The call information will always be

USA Call 866 962.6634

Global Call 857 350.9999

Passcode 10793151