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| **ahri_cert_www** | **FORM ACCL-PC3****ACCL AIR DISTRIBUTION PROCEDURE AND CHECKLIST****AHRI CERTIFICATION PROGRAM FOR AIR-COOLED WATER-CHILLING PACKAGES USING THE VAPOR COMPRESSION CYCLE**  |

**ACCL Air Distribution: Sketch Page**

**ACCL Participant:** \_\_\_\_\_\_\_\_\_\_ **Date of Test:** \_\_\_\_\_\_\_\_\_\_ **Witness Test Number:** \_\_\_\_\_\_\_\_\_\_

**Test Point:** \_\_\_\_\_\_\_\_\_\_

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T/P#6\_\_\_\_

R/C#6\_\_\_\_

T/P#7\_\_\_\_

R/C#7\_\_\_\_

A/P#3\_\_\_\_

T/P#8\_\_\_\_

R/C#8\_\_\_\_

T/P#9\_\_\_\_

R/C#9\_\_\_\_

T/P#10\_\_\_\_

R/C#10\_\_\_\_

A/P#4\_\_\_\_

Mixing Fan

Test

Chiller

T/P#1\_\_\_\_

R/C#1\_\_\_\_

T/P#2\_\_\_\_

R/C#2\_\_\_\_

T/P#3\_\_\_\_

R/C#3\_\_\_\_

T/P#4\_\_\_\_

R/C#4\_\_\_\_

T/P#5\_\_\_\_

R/C#5\_\_\_\_

A/P#2\_\_\_\_

A/P#1\_\_\_\_

Sketch Requirements:

* Show location of Test Chiller
* Show locations of all Sampling Trees/Thermopiles (T/P)
* Show connections of Sampling Trees to Aspirating Psychrometers (A/P)
* Show locations of mixing fans (if used) and direction of air flow
* Label all components and provide space for recording values

T/P#6\_\_\_\_

R/C#6\_\_\_\_

**ACCL Air Distribution: Checklist** (reference Appendix E of AHRI Standard 550/590 - 2011(I-P) or AHRI Standard 550/590 (SI))

1. Make several copies of the Sketch page and the Checklist and staple one to each other, in order to have a set of each of the pages for *each* of the Full load and Part load tests
2. Hand-sketch the top view of chiller and associated air temperature measurement equipment (on Sketch page)
3. Confirm that the Air Samplers are installed around the test chiller, as per Appendix E \_\_\_\_\_\_(initial)
4. Confirm that A/Ps are installed correctly and operational, as per Appendix E \_\_\_\_\_\_(initial)
5. Confirm that mixing fans (if used) are positioned correctly, as per Appendix E \_\_\_\_\_\_(initial)
6. Confirm that each of the T/P values are within ±0.5 °F [±0.28°C] of ambient prior to start of chiller\_\_\_\_\_\_(initial)
7. Start the chiller and Facility air systems. Once the appropriate test conditions have been reached and are stable, record temperature values (on Sketch page) as simultaneously as possible prior to the start of data collection
8. Transfer temperature values to this sheet
9. Calculate and Record *Mean Air Dry-Bulb Temperature (MADBT)* \_\_\_\_\_\_(value)
10. Confirm that each of the A/P values are within ±2.00 °F [±1.11°C] (for units </= 200 tonsR)

or ±3.00 °F [±1.67°C] (for units >200 tonsR [703 kW]) of the *MADBT* \_\_\_\_\_\_(initial)

1. Confirm that each of the T/P values are within ±1.50 °F [±0.83°C] of each A/P \_\_\_\_\_\_(initial)
2. Confirm that each of the R/C values are within ±5.0 °F [±2.78°C] of the *MADBT* \_\_\_\_\_\_(initial)
3. Once all Air Distribution checks are validated, data collection may begin

Notes:

1. *Mean Air Dry-Bulb Temperature* = Average of all A/P-recorded values
2. A/P = Aspirating Psychrometer
3. T/P = Thermopile (each Air Sampler contains a Thermopile)
4. R/C = Recirculating Thermocouple (each Air Sampler contains a Recirculating Thermocouple)

