Minimum Airflow Requirement

Temperature Split Method Calculations for determining Minimum Airflow Requirement for Refrigerant Charge Verification. The temperature split method is specified in Reference Residential Appendix RA3.2.	
System Name or Identification/Tag	1 XML - C273
Calculate: Actual Temperature Split = $T_{return, db}$ - $T_{supply, db}$	XML - C274
Target Temperature Split from Table RA3.2-3 using $T_{return, wb}$ and $T_{return, db}$	XML - C275
Calculate difference: Actual Temperature Split – Target Temperature Split =	XML - C276
Passes if difference is between -3F and +3°F or, upon remeasurement, if between -3°F and -100°F Enter Pass or Fail	○ Pass ○ Fail XML - C277
Note: Temperature Split Method Calculation is not necessary if actual Cooling Coil Airflow is verified using one of the airflow measurement procedures specified in Reference Residential Appendix RA3.3. If actual cooling coil airflow is measured, the value must be equal to or greater than the Calculated Minimum Airflow Requirement in the table below.	
Calculated Minimum Airflow Requirement (CFM) = Nominal Cooling Capacity (ton) X 300 (cfm/ton)	
System Name or Identification/Tag	1 XML - C278
Calculated Minimum Airflow Requirement (CFM)	900 XML - C279
Measured Airflow using RA3.3 procedures (CFM)	XML - C280
Passes if measured airflow is greater than or equal to the calculated minimum airflow requirement. Enter Pass or Fail	○ Pass ○ Fail XML - C281
Superheat Charge Method Calculations for Refrigerant Charge Verification. This procedure is required to be used for fixed orifice metering device systems	
System Name or Identification/Tag	1 XML - C282
Calculate: Actual Superheat = $T_{suction}$ - $T_{evaporator, sat}$	XML - C283
Target Superheat from Table RA3.2-2 using $T_{return, wb}$ and $T_{condenser, db}$	XML - C284
Calculate difference: Actual Superheat – Target Superheat =	XML - C285
System passes if difference is between -5°F and +5°F Enter Pass or Fail	○ Pass ○ Fail XML - C286
Subcooling Charge Method Calculations for Refrigerant Charge Verification. This procedure is required to be used for thermostatic expansion valve (TXV) and electronic expansion valve (EXV) systems.	
System Name or Identification/Tag	1
Calculate: Actual Subcooling = $T_{condenser, sat}$ - T_{liquid}	
Target Subcooling specified by manufacturer	