



Performance Test Report

1.0 Reference and Address					
Project Number	4788907151.5	Issue Date:	31-May-2019	Revised:	None
Standard(s)	ISO 13253:2011 UAE.S 13253:2011 UAE.S 5010-5/2016 ANSI/AHRI 210/240-2017 State of Kuwait Ministry of Electricity and Water 26.6 C/19.4C ID and 48 C OD Performance Test State of Kuwait Ministry of Electricity and Water 26.6 C/19.4C ID and 52 C OD 2-hour continuity test				
Model(s) Tested	SAGN-024T EL3T2412SPBCTA	Date of Test	4/16/2019 to 4/17/2019		
		Brand Name			
Applicant	UL LLC	Manufacturer	Rheem Manufacturing Company		
Address	801 Klein Road Suite 200 Plano, TX 75074-3779	Address	5600 Old Greenwood Rd. Ft. Smith, AR 72906		
Country	USA	Country	USA		
		Contact	Brent Matheny		
		Phone	479-648-4663		
		Email	Brent.Matheny@rheem.com		
Report prepared by:	Josh Farrell	<i>Josh Farrell</i>	Report reviewed by:	Angelo Z. Sakellariou	<i>Angelo Z. Sakellariou</i>

Intended Use of This Test Report:

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UL LLC did not select the samples, determine whether the samples were representative of production samples, witness the production of the test samples, nor were we provided with information relative to the formulation or identification of component materials used in the test samples. The test results apply only to the actual samples tested. UL LLC has no vested interest in the results of this testing and hereby certifies the impartial manner in which the testing was performed.

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2.0 Product Description							
Unit Type	Ducted Packaged Air-Conditioner						
Brand name	Rheem						
Unit Description	Ducted Split System Air-Conditioner						
Models	Outdoor Model# SAGN-024T (+) (++) may be followed by additional suffixes Indoor Model# EL3T2412SPBCTA						
	(+) Followed by suffix: A - Base Unit S - Base unit with oil separator			(++) Optional Suffix: A35 - Coated fin with time delay O35 - Coated Fin O11 - with time delay			
Model Similarity	Outdoor Identical to Ruud Model VAGN-024T(+) (++) except for Model # and Brand Name Indoor Identical to Ruud Model VL3T2412SPBCTA except for Model # and Brand Name (+) - may be followed by additional suffixes						
Rated Power Supply	<i>Model Number</i>	<i>Voltage</i>	<i>Phase</i>	<i>Frequency</i>	<i>Refrigerant</i>		
	Indoor Unit	220-240	1	50	410A		
	Outdoor Unit	220-240	1	50	410A		
Other Ratings	N/A						

Test Procedure:
ISO 13253:2011 UAE.S 13253:2011 UAE.S 5010-5/2016 ANSI/AHRI 210/240-2017 State of Kuwait Ministry of Electricity and Water 26.6 C/19.4C ID and 48C OD Performance Test State of Kuwait Ministry of Electricity and Water 26.6 C/19.4C ID and 52 C OD 2-hour continuity test
Pass/Fail Criteria
The intent of these tests is a third party verification of the energy efficiency values. The 2-Hour Continuity Test must operate for 2-hours without tripping or overheating.

3.0 Calibration Information				
Instrumentation ID	Description	Function	Calibration Date	Calibration Due Date
Facility 2	Test Room	Temperature, humidity, pressure, power, voltage	3/5/2019	3/5/2020

4.0 Product Photographs

Photo 2 - Condensing Unit Nameplate

MODEL NO.: SAGN-024T SERIAL NO.: W071918247
 رقم الموديل: الرقم التسلسلي:
 VOLTS: 230-240 PHASE: 1 HERTZ: 50
 الفولت: الطور: التردد بالهرتز:
 OUTDOOR CURRENT: 11.21 REFRIGERANT: R-410A
 تيار الوحدة الخارجية: غاز التبريد:
 DESIGN PRESSURE HIGH: 550 PSIG 3792 kPa
 الضغط المرتفع حسب التصميم:
 DESIGN PRESSURE LOW: 250 PSIG 1724 kPa
 الضغط المنخفض حسب التصميم:
 OUTDOOR UNIT FACTORY CHARGE: 82.9 OZ 2.35 kg
 شحنة الوحدة الخارجية من المصنع:
 TOTAL SYSTEM CHARGE: OZ kg
 الشحنة الإجمالية للنظام:



MATCHED SYSTEM RATING	EL3T24125PBCTA	
	(F1)	(F3)
تقدير الأحمال المتطابق:	35-2719	46-2919
RATED CURRENT: التيار الكهربائي المعياري:	8.79	12.40
RATED POWER: القدرة الكهربائية المعيارية:	1.731	1.710
RATED CAPACITY: قدرة التبريد المعيارية:	12580	19600
E.E.R.:	13.60	9.72



RHEEM SALES COMPANY INC.
 FORT SMITH, ARKANSAS

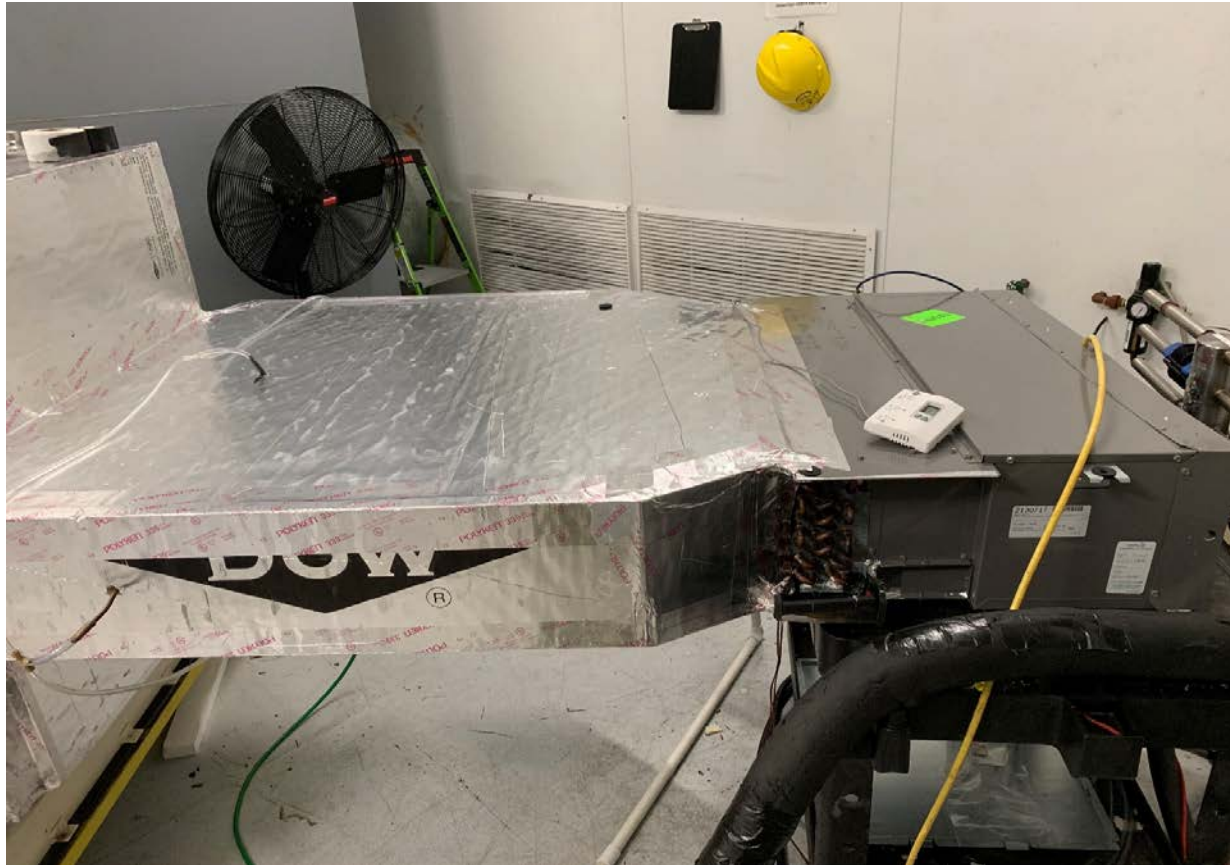
IP204
 MADE IN MEXICO
 تم التجميع في:



92-22050-17

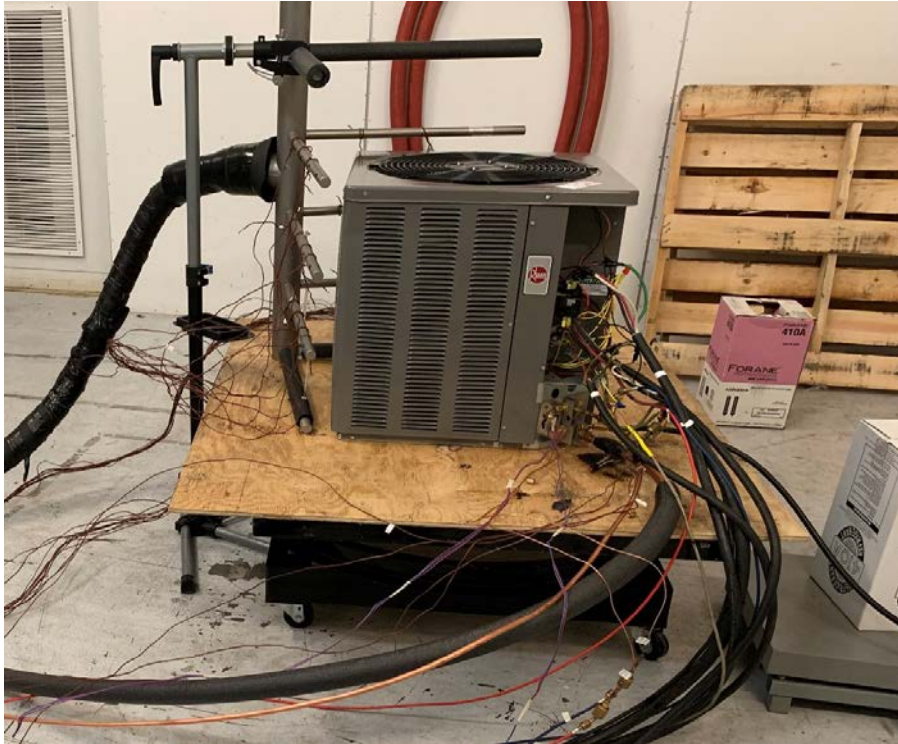
4.0 Product Photographs

Photo 6 - Air Handler Setup



4.0 Product Photographs

Photo 7 - Condenser Setup



6.0 Critical Features

Recognized Component(R/C) - A component part, which has been previously evaluated by an accredited body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. Any dimensions are approximate unless specified as exact or within a tolerance.

7.0 Illustrations

Illustration 1 - Condenser Manual

INSTALLATION INSTRUCTIONS

R410A/60HZ CONDENSING UNITS

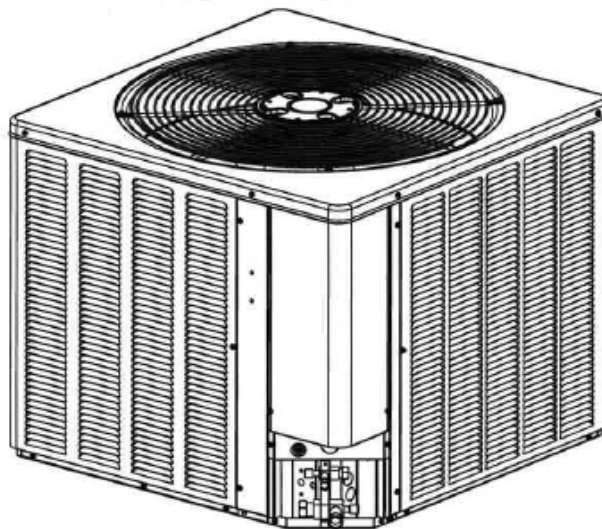
*AGN – SERIES

*AHM – SERIES

R410A/50HZ CONDENSING UNITS

*AGL – SERIES

*AGN – SERIES



*S or V

NOTE: Appearance of unit may vary.



RECOGNIZE THIS SYMBOL AS AN INDICATION OF IMPORTANT SAFETY INFORMATION!

▲ WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED, LICENSED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS UNIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



DO NOT DESTROY THIS MANUAL

PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE BY A SERVICEMAN



92-21354-95-06
SUPERSEDES 92-21354-95-05

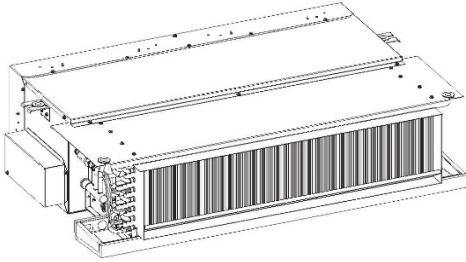
7.0 Illustrations

Illustration 2 - Air Handler Manual (English)

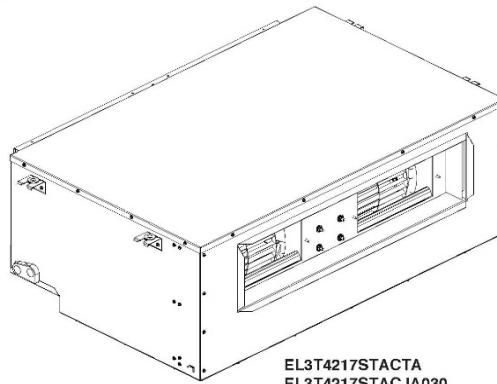
INSTALLATION INSTRUCTIONS

EL3T HIGH EFFICIENCY AIR HANDLERS

FEATURING INDUSTRY STANDARD R-410A REFRIGERANT



EL3T1812SPBCTA
EL3T1812SPBCJA030
EL3T2412SPBCTA
EL3T2212SPBCJA030
EL3T3012SPBCTA
EL3T2812SPBCJA030
EL3T3612SPBCTA
EL3T3212SPBCJA030



EL3T4217STACTA
EL3T4217STACJA030
EL3T4817STACTA
EL3T4817STACJA030
EL3T6017STACTA
EL3T5517STACJA030
EL3T6518STACTA
EL3T6518STACJA030



RECOGNIZE THIS SYMBOL AS AN INDICATION OF IMPORTANT SAFETY INFORMATION!

WARNING

These instructions are intended as an aid to qualified licensed service personnel for proper installation, adjustment and operation of this unit. Read these instructions thoroughly before attempting installation or operation. Failure to follow these instructions may result in improper installation, adjustment, service or maintenance possibly resulting in fire, electrical shock, property damage, personal injury or death.



DO NOT DESTROY THIS MANUAL
PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE BY A SERVICEMAN



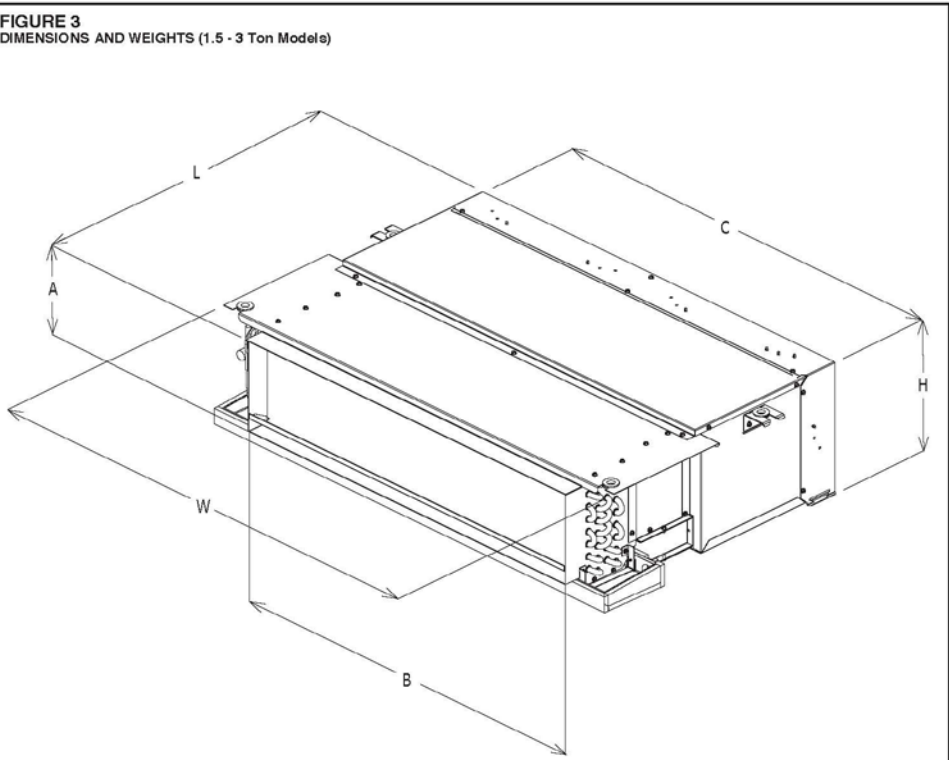
92-20521-108-02
SUPERSEDES 92-20521-108-01

7.0 Illustrations

Illustration 3 - Air Handler dimensions

2.5 DIMENSIONS & WEIGHTS

FIGURE 3
 DIMENSIONS AND WEIGHTS (1.5 - 3 Ton Models)

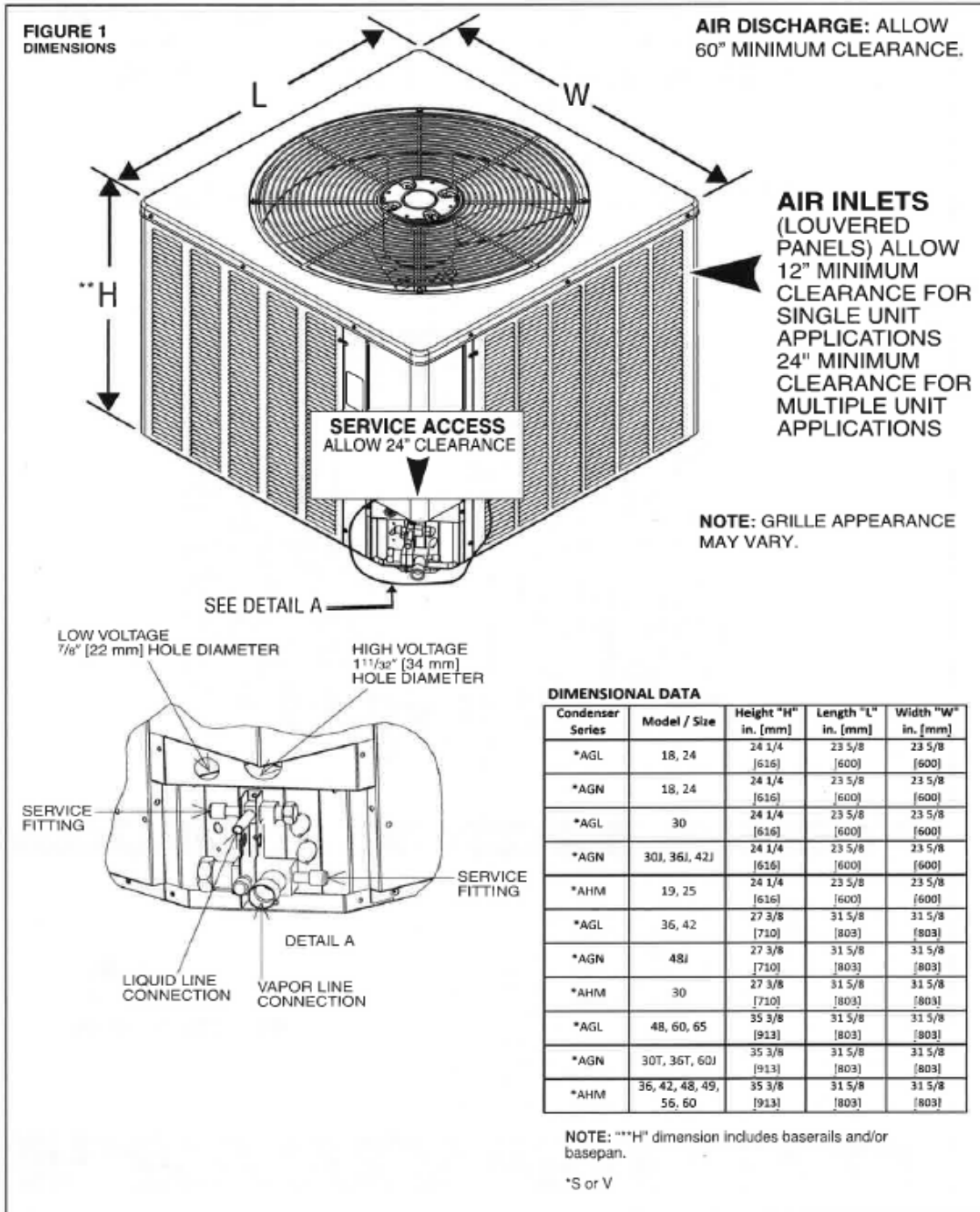


MODEL (EL3T)	REFRIGERANT CONNECTIONS SWEAT (IN.) [mm] ID		UNIT HEIGHT IN. [mm]	UNIT WIDTH IN. [mm]	SUPPLY DUCT		RETURN DUCT C IN. [mm]	UNIT WEIGHT/ SHIPPING WEIGHT LBS. [KG]
	LIQUID	VAPOR			A IN. [mm]	B IN. [mm]		
1812, 2212, 2412	3/8" [9.53]	3/4" [19.05]	10.5" [264.54]	37" [939.80]	7.25" [183.90]	30" [763.73]	33.5" [850.95]	78/84.62 [35.38/38.38]
2812, 3012, 3212, 3612	3/8" [9.53]	3/4" [19.05]	10.5" [264.54]	49" [1244.60]	7.25" [183.90]	42" [1066.80]	45.5" [1155.70]	98/104.60 [44.45/47.45]

7.0 Illustrations

Illustration 4 - Outdoor section dimensions

2.3 (SEE FIGURE 1)



8.0 Test Summary

Date of Test 4/16/2019 to 4/17/2019

Test Standard UAE.S 13253:2011

Test Description	Test IDU/ODU Conditions	Rated EER (BTU/Hr W)	Tested EER (BTU/Hr W)	Rated Capacity (BTU/Hr)	Tested Capacity (BTU/Hr)	Rated Total Watts (Watt)	Tested Total Watts (Watt)	Rated Total Current (Amp)	Tested Total Current (Amp)	Tested Total OD Watts (Watt)	Tested COP (W/W)	Tested OD COP (W/W)	Tested KW/Ton
T1	27/19-35C	13.00	14.585	22500.00	22472.913	1731.00	1540.800	8.79	10.10	1359.7	4.28	4.84	
T3	29/19-46C	9.72	11.437	19600.00	19535.124	1710.00	1708.100	12.40	12.40	1532.8	3.35	3.73	
MEW	80/67-118.4F	9.800	9.796	18861.00	18861.042	1925.00	1925.300			1746.8	2.87	3.16	1.22
MEW CONTINUITY	80/67-125.6F	Passed 2 - hour continuity @ 125.6 F, 52 C											

Tested Capacity shown here is Gross capacity which includes the effect of the evaporator fan motor heat