

# **ULT-Freezer Performance Data Sheet**



## Technical Specifications: CryoCube® F740 - Air-Cooled (230 V)

reclinical Specifications. Cryoc	abe 1740 All Coolea (250 V)	
Intended use	<ul> <li>Cold storage of standard laboratory materials</li> <li>Indoor use only, between 15 and 32 °C</li> <li>Altitude up to 2000 m</li> <li>Non-corrosive, non-flammable, non-explosive environment</li> </ul>	
Environmental conditions	<ul> <li>&gt; Good air ventilation required</li> <li>&gt; Maximum relative humidity 80 % for temperatures up to 31 °C</li> <li>&gt; No mains/power supply voltage fluctuations</li> </ul>	
Electrical rating (1 phase)	230 V/50 Hz	
Current rating	6.0 A	
Agency listing	> WEEE > ROHS > REACH > All components tested to CE specifications	

## Dimensions

Internal dimensions	1390 x 865 x 621 mm
(H x W x D)	(54.7 x 34.1 x 22.6 in)
External dimensions*	1973 x 1099 x 915 mm
$(H \times W \times D)$	(77.7 x 43.3 x 36.0 in)
External packaging	2225 x 1200 x 1045 mm
dimensions (H x W x D)	(87.6 x 47.2 x 41.1 in)
Net weight	308 kg (679 lbs) / 317 kg (699 lbs)
Shipping weight	357 kg (787 lbs) / 366 kg (807 lbs)

<sup>\*</sup>To allow for handles and hinges, add 80 mm to width.

## Capacity

Storage vol	ume	740 L (26.1 ft <sup>3</sup> )	
Number of compartments		3/5	
Racks per shelf		6	
Racks per f	reezer	18 / 30	
Box	50 mm (2 in) box	576 / 528	
capacity	75 mm (3 in) box	360 / 288	
100 mm (4 in) box		288 / 264	
Sample	50 mm (2 in) box	57,600 / 52,800	
capacity			
Temperatui	re rating	-50 °C to -86 °C	

#### **User Interface**

Alarms	Adjustable high/low temperature, power	
	fail, battery low, filter clean, fault	
Password protection	Yes	
(freezer settings)		
Remote alarm port	Standard	
RS-485 interface	Standard	
Ethernet	Standard	
Lock	Specific / manual	
Temperature control	Microprocessor	
Cabinet control probe	PT 100	

## **Refrigeration System Specifications**

Kerrigeration System Specifications		
Refrigeration system	2 stage cascade cooling system	
Compressors	Commercially available, heavy duty	
	compressors	
Defrost method	Manual	
Refrigerant charge	High stage: R404a	
	Low stage: R508b	
Condensing method	Air-cooled	
Expansion device	Capillary tubes	
Evaporator type	Cold wall	

#### Construction

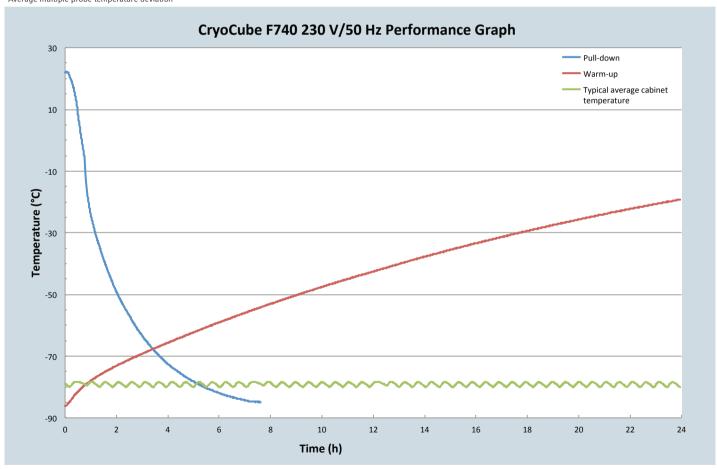
Interior	Stainless steel grade 304 2B	
Exterior	Powder-coated steel	
Insulation	Vacuum insulation panels (body) and polyurethane foam	
Power switch	Secured	
Inner doors	Insulated and sealed	
Casters/level legs	Heavy duty (250 kg each)	



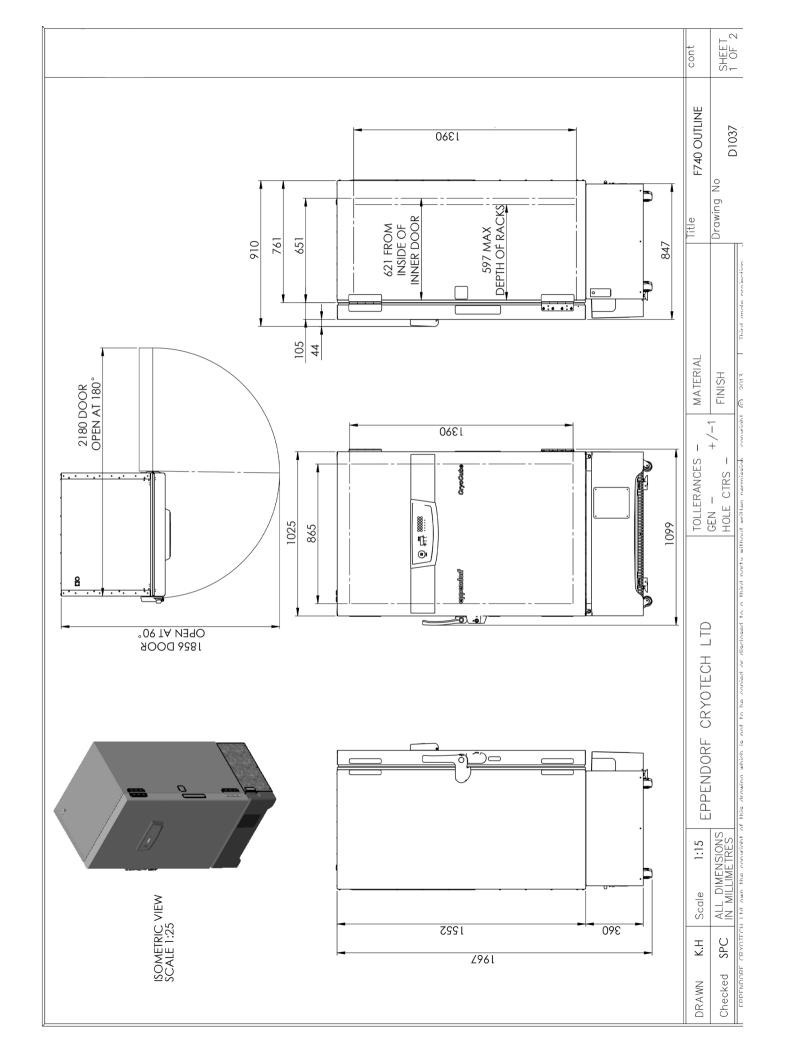
Typical Performance Characteristics at 20 °C +/- 1 (Ambient Temperature)

Pull down time	5 h			
(freezer empty, from ambient to -80 °C)				
Power consumption	12.9 kWh/day / 9.6 kWh/day			
(freezer set to -80 °C/-70 °C)	-	-		
Cabinet uniformity <sup>1</sup>	+3.4 °C/-0.1 °C			
(freezer set to -80 °C)				
Max. heat output	538 W/400 W (1836 BTU/h / 1365 BTU/h)			
(freezer set to -80 °C/-70 °C)				
Warm up time	42 h			
(freezer 2/3 full, from -85 °C to 0 °C)				
Noise level (at -80 °C)	47.8 dB			
Door open recovery	120 s	60 s	30 s	15 s
(freezer set to -80 °C)	43 min	30 min	23 min	15 min
Duty cycle (on/off)	20/10 min			
Electric/mains	6.0 A			

<sup>1</sup>Average multiple probe temperature deviation



Technical specifications subject to change





Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

## www.wolflabs.co.uk

Tel: 01759 301142

Fax: 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.