Critical Environment Control

1201 North Catalina Ave. #818 Redondo Beach, CA 90277 (310) 372-5011 **FAX** (866) 882-7457 John@ceccertify.com

Classification of Air Cleanliness

Company

Circor Aerospace Inc 2301 Wardlow Circle Corona, CA 91720 Test Specification ISO 14644-1 (2015-12-15) Test Area Cleanroom 1 Date of Certification July 6, 2020 Certification Expires July 15, 2021

Designation Criterion for Cleanrooms in this Test Area

ISO Class 7: Considered Size: 0.5 µm (352,000 particles/m3)

	M ³	M ³	Relative			Occupancy
Facility	0.5 µm	5.0 µm	Humidity	Temperature	Certification	State
Cleanroom 1	1,843	61	56.0%	70.0	ISO Class 7	At Rest

This ISO Class Certification compares the results of this test to maximum concentrations delineated in Table 1, ISO 14644-1. The number of test samples taken are pursuant to A.4.1. One sample test is taken at each test location. The cleanrom is deemed to have met the Specified ISO Class if the number of particles/cubic meter at each sample location does not exceed the limits delineated in Table 1 (A.6.2.1)

Testing was performed with a Climet Instruments Airborne Particle Counter. This instrument is calibrated at manufacturers recommended intervals. This instrument has been calibrated in accordance with ISO 10012-1 and ANSI Z540-1 (Which replaces MIL-STD-45662A). Calibration traceability to a National Measurement Standard (NMS) is established by using mono-disperse latex spheres as a calibration standard. These spheres are sized by methods traceable, by lot number, to the National Institute of Standards and Technology.

All Particle Counters have a current calibration decal and / or evidence of calibration on the instrument display. A copy of the Calibration Certificate will be provided to you on request.

Critical Environment Control certifies that the test results recorded on this document are accurate as of the time of this test. Critical Environment Control hereby certifies that the above described systems met the acceptance criterion for the Air Cleanliness Classes delineated above.

Critical Environment Control

All Calible

Critical Environment Control Test Results

Æ

The Aerospace Opport Room 13712

Test Spectfitations

ISO Class Designation		ion ISO (Class 8	Test Specif	1		
SCO Bister De Biantiatio Bize		aize ISOC	5auss 7	SamflowsRatest Point			128.3 LPM
Civiaside red Partitides SM2		SM2 0.3µ572	0,000	AMflorivn RatSąbitelesVoMunnete)			2/80.03 6 LTR
Maximba	m#artieteBo/u	Mas 352,02	ØØ	Macimal Barapie Volutees)			028537LTR
Number of Test Points 14			Test Datatual Sample (Liters)			28	
Date Tested: 12/05/2017		7	Test D	te:	Operational		
DistextTested: C		0 7/06<i>5</i>/28 98		Qreeupaniay Estate:			At R e st
Centifications D		07115020201			¹ 213 M ²		
Time of Test:		8:58 AM		Room Size:			$39 M^2$
Test	28.3 L	M ³		28 L	<u>M³</u>		Temperature
Tresitnt	268.5°µlm	0 \\5 jum		₿ ₿0µm	5 № µm	RH	Tem pe rature
Point	0.5µm	0.5µm	Pass	5.0µm	5.0µ3®	5 £6 %	65 F 0
12	171	60305	Plass s	31	10365	55560%	6 57.0
23	541	1,9 365	Plass s	31	10365	55560%	6 5 7.0
34	281	98365	Plass s	01	085	55560%	6 5 7.0
45	521	1,8 35	Plass s	11	3 5 5	55560%	6 5 7.0
56	281	98385	Plass s	21	7 3 5	55560%	6 5 7.0
67	861	3,0 35	Plass s	11	3 5 5	55560%	6 5 7.0
78	130	4,5 89	Plass s	31	10365	55560%	6 5 7.0
89	311	1,0 3 54	Plass s	11	3 5 5	55560%	6 5 7.0
910	571	2,0352	Plass s	01	085	5560%	657.0
1 0 1	371	1,3 8 5	Plass s	21	7 3 5	55560%	6 5 7.0
1 1 2	431	1,53 5	Plass s	21	735	5560%	657.0
1 2 3	471	1,6 35 9	Plass s	11	3 5 5	5560%	657.0
1 3 4	10 5	3,7 1357	Plass s	41	14315	5560%	657.0
145	161	56355	Plass s	11	3 5 5	5560%	6 5 7.0
16	1	35	Pass	1	35	55.0%	65.0
17	1	35	Pass	Test Re	sults 35	55.0%	65.0
¹⁸ 0.5µm M ³		5.0µm M ³ Pass A ³ yerage Pass		RH	Temperature	55.0% Certifigetion	Occupancy
¹⁹ Average ¹					F ³⁵		
²⁰ 1,843 ¹		35 61	Pass	56% Test Re	70 ⁵ sults	ISO Class 7	At Rest
0.5µm M ³		5.0µm M ³		RH	Temperature		Occupancy
Average		Average			F ⁰	Certification	State
	35	35		55.0%	65.0	ISO Class 8	Operational

Critical Environment Control Particle Count Location Map



Circor Aerospace Inc

2301 Wardlow Circle Corona, CA 91718

Reference: CR #1