

IC-A220 Environmental Qualification Form (EQF)

Nomenclature:

ICOM IC-A220 VHF Air Band Transceiver

Type/Model/Part Number:

VHF Air Band Transceiver/IC-A220/IC-A220T-0-00

TSO Number:

TSO C169a/C128a

Manufacturer Specifications:

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Manufacturer:

ICOM America Inc.

Address:

ICOM America Inc.
12421 Willows Road NE
Kirkland, WA 98034
USA

Date Tested:

February 2016-May 2016

RTCA DO-160G Conditions	DO-160G Section	Description of Conducted Tests
Temperature and Altitude	4.0	Equipment tested to Categories A1F1
Short-Time Operating Low Temperature	4.5.1	Operating Low Temperature -40C
Operating Low Temperature	4.5.2	Operating Low Temperature -20C
Short-Time Operating High Temperature	4.5.3	Operating High Temperature +70C
Operating High Temperature	4.5.4	Operating High Temperature +55C
In-Flight Loss of Cooling	4.5.5	Not tested. External cooling is not required
Altitude	4.6.1	55000ft
Decompression	4.6.2	55000ft
Overpressure	4.6.3	-15000ft
Temperature Variation	5.0	Equipment tested to Category B
Humidity	6.0	Equipment tested to Category A
Operational Shock and Crash Safety	7.0	Equipment tested to Category B Standard Operational and Crash Safety
Sustain Crash Safety	7.3.3	Aircraft Type 3 , Test Type F

Vibration	8.0	Equipment tested to Category S, Test Curves B & M
Explosive Atmosphere	9.0	Equipment identified as Category X, no test performed
Waterproofness	10.0	Equipment identified as Category X, no test performed
Fluids Susceptibility	11.0	Equipment identified as Category X, no test performed
Sand and Dust	12.0	Equipment identified as Category X, no test performed
Fungus Resistance	13.0	Equipment identified as Category X, no test performed
Salt Fog	14.0	Equipment identified as Category X, no test performed
Magnetic Effect	15.0	Equipment tested to Category Z
Power Inputs	16.0	Equipment tested to Category (A,B)XX14 and 28VDC
Voltage Spike	17.0	Equipment tested to Category A
Audio Frequency Conducted Susceptibility , Power Inputs	18.0	Equipment tested to Category B
Induced Signal Susceptibility	19.0	Equipment tested to Category ZC
Radio Frequency Susceptibility	20.0	Equipment tested to Category RR
Emission of Radio Frequency Energy	21.0	Equipment tested to Category M
Lightning Induced Transient Susceptibility	22.0	Equipment tested to Category A2C2XX
Lightning Direct Effect	23.0	Equipment identified as Category X, no test performed
Icing	24.0	Equipment identified as Category X, no test performed
Electrostatic Discharge	25.0	Equipment tested to Category A
Fire, Flammability	26.0	Equipment tested to Category C