

Test Certificate

CERTIFICATE No: TRA030624CC01

ISSUE: A

DATE: 29/02/2016

PURPOSE OF TEST: Environmental Testing

CLIENT ORDER No: 1771

CLIENT: Andrew Atkinson
C2UK Ltd, Unit 1, Twyford Court, Rotherwas, Hereford,
GB. HR2 6JR.

EQUIPMENT UNDER TEST: Part Number: C-Lite TAC
Element Stores Number: TRA-030624-S1
Receipt date: 11th February

TEST SPECIFICATIONS: Tested in accordance with Element quotation TRA-030624-02 date 3rd February 2016 which refers to DEF STAN 00-35, Part 3, Issue 4 and MIL-STD-810G

TEST DATE: 11th February 2016 to 15th February 2016

TEST LOCATION: Element Materials Technology, Rothwell Road, Warwick,
Warwickshire, CV34 5JX

WRITTEN BY:



Richard Santhouse
Test Engineer

APPROVED BY:

Matthew Pitham
Department
Manager -
Environmental

The results herein relate only to the particular samples of equipment tested and the specific tests performed, as detailed above, and in accordance with the contract. Full details of test results, modifications and marginal results are held by Element Materials Technology Warwick Ltd. The quality control arrangements are in accordance with our UKAS accreditation. No representation or warranty is given that the tests performed under the terms of contract constitute, in themselves, a sufficient programme for the client's purpose, nor that the client's equipment is suitable for any particular purpose, nor that any approval has or will be granted by Element Materials Technology Warwick Ltd or any other body. The contents of this certificate shall not be reproduced, except in full, without the written approval of Element Materials Technology Warwick Ltd.

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TESTS CARRIED OUT:High Temperature and Humidity Test

The specimen was operational and placed in a chamber. A platinum resistance thermometer (PRT) and humidity probe was placed adjacent to the specimen to measure the air temperature and humidity. An additional one PRT was attached to the specimen. The sensors were connected to an external digital chart recorder to record the temperatures and humidity throughout the test.

The air temperature and humidity were stabilised at the required start levels, and the specimen was tested in accordance with the specification. On completion the specimen was returned to laboratory ambient conditions where it was visually inspected and function checked

Low Temperature Test

The specimen remained operational in the same chamber from the previous test in the same configuration.

The air temperature was stabilised at the required start levels, and the specimen was tested in accordance with the specification. On completion the specimen was returned to laboratory ambient conditions where it was visually inspected and function checked

Vibration and Shock Test

The specimen was fixed to an adapter plate, which in turn was attached to an electrodynamic vibration system for the Z axis and a hydrostatic slip plate for the X and Y axes. Two control accelerometers were attached at the specimen/fixture interface in diametrically opposite corners and an averaged control strategy was employed.

The specimen was operational and subjected to the vibration test in the Z axis in accordance with the specification. On completion the specimen was visually inspected by the Element Test Engineer and function checked by the C2UK Limited representative.

The specimen remained operational and was subjected to the shock test in accordance with the specification in the same axis, using control accelerometer 1 utilising a single point control strategy. On completion the specimen was visually inspected and function checked.

On completion the specimen was reconfigured into the X axis and the vibration and shock test sequence was repeated. Finally the specimen was rotated into the Y axis and the test sequence was repeated.

TEST RESULTS:

The specimen completed the test in accordance with the specifications. No visible sign of damage or degradation was noted to the specimen upon completion of the test. The C2UK Limited representative reported the specimen operated correctly without any issues throughout and upon completion of the test.