

EDA workshop

Importance of Test and Evaluation Standards for CBRN Detection



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Bruker Detection



Broad Instrument & Technology Portfolio
for
CBRN Defence
and
Safety & Security



Standards



- Defining products requires a set of standards against which the product will be tested
- Things which are clear:
 - MIL-STD 461E/F
 - MIL-STD 810F/G
 - CE
 - IEC
- Analytical Standards??

MIL-Standards



- Issued by accreditation organizations
- Accepted world wide
- International accreditation procedure

MeßTechnikNord GmbH
Akkreditierte Labore für Kalibrierung und EMV

TEST REPORT

Test: EMC Tests according to MIL-STD 461E
(Radiated emission and Susceptibility Tests)

Test Report No.: 05422.006-1.07

Tested Item: RAID-S2 system

Customer: Bruker Daltonik GmbH
Permoserstrasse 15 ♦ D-04318 Leipzig

MeßTechnikNord GmbH
Akkreditierte Labore für Kalibrierung und EMV
Address:
Industriestraße 29
D-22090 Wistedt - Germany
EMC Centre
Accredited Testing Laboratory
Phone: (+49 4103) 80997 - 10
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D-038 93-03

RST
TESTING THE WORLD FOR YOURSELF

Customer: Environmental Lab, Bruker Daltonik GmbH, Mr. Nagel, Quality Assurance, Permoserstr. 15, 04318 Leipzig

Environmental Lab RST Test System Testing GmbH, Pöhlitz-Walden 10, 06361 Hainrodt
Materials Lab 10381 Hainrodt
File Lab Fax: +49 03302 49802-3, Fax: +49 03302 49802-15
New Technologies www.rst-lab.de, info@rst-lab.de

Test Certificate No. P50-12-0106e_Zert Environmental Tests

Order No.: 50-12-0010 (3219) This report contains 8 pages.
Date: 2/19/2012
Test engineer: Mr. Schütz / Mr. Lohdau phone: 03302 49862 50
Documentation: none/NA

Delivery date specimen: 20/01/2012
Test date: 31/01/2012 until 26/03/2012
Specimen: 3 pieces Detector µRAID Ident No. SC 1000 G 101-3 equipped with additional parts for different configurations (specimen No. 50-12-3219-1 - 3) (detailed see page 2)
Relevant specification: - Climate, corrosive, sand- and dust and shock tests according to MIL-STD 883C (edition 2008)
- Evaluations (detailed see page 2)
Objective: Proof of operability of the detectors µRAID after the individual tests
Results: The µRAID detectors were tested according to the relevant specification. No changes were detected in comparison with the initial state of the µRAID at the inspections after the tests. The operability of the tested µRAID was ensured at each control time according to the relevant specification. The protection degree IP65 is ensured for the tested µRAID (specimen No. 50-12-3219-3) (detailed see page 3).
(This certificate is valid only in conjunction with the detailed test report.)

Bernd Sommerfeld
Head of the Environmental Lab

The results refer only to the specimens above mentioned.
This Test Report must always be copied entirely. Any copying of extracts and publication requires the prior consent of the Laboratory.

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MIL-Standards



- Testing is expensive and time consuming

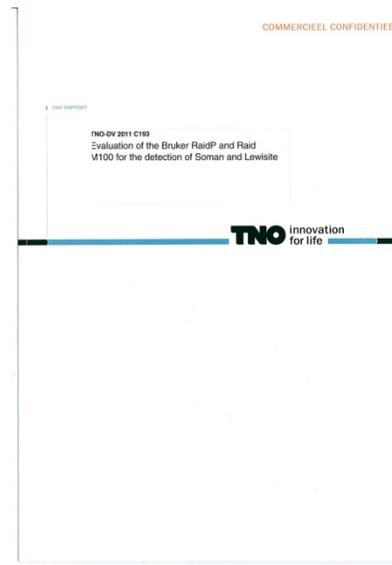
But done only once!



Analytical Testing



- Issued by renowned organizations
- OPCW accreditation



Analytical Testing

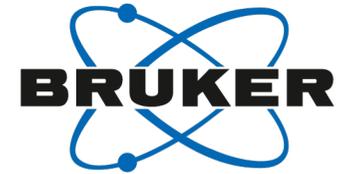


Observations

- Laboratories do have different methodology
- Methodologies are not easy to compare
- Different levels of experience



Analytical Testing



- Each country has a different set of requirements
- Lab-test vs. Field test

Retesting is often a requirement!



Suggestions II Analytical Testing



- Create an accredited network of organizations
(First initiatives like CREATIF of FP7)
- Define a joint set of requirements and the relevant testing conditions
- Agree on a joint methodology
- Specialization on the different parts of CBRNE
- Develop a scenario based testing??

Questions

