

PRODUCT STATE REPORT

No. 210292 Revision A

FINAL

MEU / EMC

TEMPORARY

Product : Mephisto/Prometheus Laser Series III

Written by : M. Ferrani

Factory : Innolight Innovative Laser und Systemtechnik GmbH

Date : 01.10.01

Vahrenwalder Str. 7, 30165 Hannover

Dept. : Technik

Attn : Herr Dölle

Copy :

faxed on : No. 0511 93 57 179

4.10.2001

4.10.2001

Examination

Product related approval and MEU Lab.No. MEU

passed

not passed

passed with below mentioned Modification

obtained

mark or number to be fixed to the product

Date of issue

210292a - Rev.A
210292b - Rev.A
210292c - Rev.A
210292d - Rev.A
210292e - Rev.A
210292f - Rev.A
210292g - Rev.A

according to directive 89/336/EEC



01.10.2001
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Test Report

Report / Remark : The above mentioned product was tested in accordance to the following standards:
EN 55022 Class B: 1998 (IEC CISPR 22: 1997, modified)
EN 61326-1: 1997 + A1: 1998, including:
EN 61000-4-2: 1995 + A1: 1998; EN 61000-4-3: 1996 + A1: 1998; EN 61000-4-4: 1995;
EN 61000-4-5: 1995; EN 61000-4-6: 1996; 61000-4-11: 1994;
EN 61000-3-2: 1995 + Corrigendum: 1997 + A1: 1998 + A2: 1998 + A14: 2000; EN 61000-3-3: 1995

Enclosures: - Testschedule No 210292 Revision A

■ Test Reports No. MEU 210292 a-g Revision A

According to the German EMC Law §4, chapter (1), point 4 and point 6 and § 6, chapter (6), point 1 an information about the operating restrictions (see Annex 1) must be attached or indicated to each set. According to the directives 89/336/EEC and 93/68/EEC a declaration of conformity must be issued for this product!

Signed by M. Ferrani

M. Ferrani

Reviewed by V. Briddickell

V. Briddickell

Types species Laser System

Type name Mephisto/Prometheus Laser Series III

Serialnumber 210292 attached

Manufacturer siehe Auftraggeber
see Applicant

Applicant Innolight Innovative Laser und Systemtechnik GmbH
Vahrenwalder Str. 7, 30165 Hannover

Test Standards Immunity: EN 61326-1 : 1997 + A1: 1998 including:
EN 61000-4-2: 1995 + A1: 1998
EN 61000-4-3: 1996 + A1: 1998
EN 61000-4-4: 1995
EN 61000-4-5: 1995
EN 61000-4-6: 1996
EN 61000-4-11: 1994

Emission: EN 55022 Class B: 1998
(IEC CISPR 22: 1997, modified)
EN 61000-3-2: 1995 + Corrigendum: 1997
+ A1: 1998 + A2: 1998 + A14: 2000
EN 61000-3-3: 1995

Configuration and
operating mode see Test Reports

Performance Criteria : (Immunity)

- A - Normal operation within the specified operation conditions.
- B - Temporary functional impairment, EUT returns to normal operation without operator intervention
- C - System reset or impairment of function during the test which requires operator intervention.



Test requirements 230V/50HZ

| Environmental phenomena | Basic standard | Test specification and units | Ports | Performance criteria | Test results | Performed at |
|--------------------------------|----------------|--|--------------------------------|----------------------------|--------------|--|
| ESD | EN 61000-4-2 | 8 kV Air | touchable, nonconductive parts | B | Ä | MEU Test Report No.: 210292b Rev. A |
| ESD | EN 61000-4-2 | 4 kV Contact | touchable, conductive parts | B | Ä | MEU Test Report No.: 210292b Rev. A |
| BURST | EN 61000-4-4 | 1 kV 5 kHz | Power input (AC) | B | Ä | MEU Test Report No.: 210292b Rev. A |
| SURGE | EN 61000-4-5 | sym.: 1 kV unsym.: 2 kV | Power input (AC) | B | Ä | MEU Test Report No.: 210292d Rev. A |
| Radio-Frequency common mode AM | EN 61000-4-6 | 0.15 ... 80 MHz 3V, 80% AM (1 KHz), 150Ω impedance | Power input (AC) | A | Ä | MEU Test Report No.: 210292e Rev. A |
| Radio-Frequency common mode AM | EN 61000-4-6 | 0.15 ... 80 MHz 3V, 80% AM (1 KHz), 150Ω impedance | Power input (AC) | A | Ä | MEU Test Report No.: 210292e Rev. A |
| DIPS | EN 61000-4-11 | >95% Red. (0,5 periods) | Power input (AC) | B | Ä | MEU Test Report No.: 210292f Rev. A |
| Mains Harmonics | EN 61000-3-2 | Eq. Class D 3 ≤ n ≤ 40 | Power input (AC) | ≤ 4% | complied | MEU Test Report No.: 210292g Rev. A |
| Flicker | EN 61000-3-3 | d,max | Power input (AC) | Limits of EN 61000-3-3 | complied | MEU Test Report No.: 210292g Rev. A |
| EM Field | EN 61000-4-3 | 80...1000 MHz 3V/m, 80% AM horiz. & vertic. | Enclosure and connected cords | A | Ä | MEU Test Report No.: 210292c Rev. A |
| Interference Voltage | EN 55022 | 0.15 ... 30 MHz | Power input (AC) | Limits of EN 55022 Class B | complied | MEU Test Report No.: 210292a Rev. A |
| Interference Radiation | EN 55022 | Class B 30 - 1000 MHz | Enclosure 3m Testsite | Limits of EN 55022 Class B | complied | MEU Test Report No.: 210292a Rev. A |



| Environmental phenomena | Basic standard | Test specification and units | Ports | Performance criteria | Test results | Performed at |
|--------------------------------|----------------|--|--------------------------------|----------------------------|--------------|--|
| ESD | EN 61000-4-2 | 8 kV Air | touchable, nonconductive parts | B | Ä | MEU Test Report No.: 210292b Rev. A |
| ESD | EN 61000-4-2 | 4 kV Contact | touchable, conductive parts | B | Ä | MEU Test Report No.: 210292b Rev. A |
| BURST | EN 61000-4-4 | 1 kV 5 kHz | Power input (AC) | B | Ä | MEU Test Report No.: 210292b Rev. A |
| SURGE | EN 61000-4-5 | sym.: 1 kV unsym.: 2 kV | Power input (AC) | B | Ä | MEU Test Report No.: 210292d Rev. A |
| Radio-frequency common mode AM | EN 61000-4-6 | 0.15 ... 80 MHz 3V, 80% AM (1 KHz), 150Ω impedance | Power input (AC) | A | Ä | MEU Test Report No.: 210292e Rev. A |
| Radio-frequency common mode AM | EN 61000-4-6 | 0.15 ... 80 MHz 3V, 80% AM (1 KHz), 150Ω impedance | Power input (AC) | A | Ä | MEU Test Report No.: 210292e Rev. A |
| DIPS | EN 61000-4-11 | >95% Red. (0,5 periods) | Power input (AC) | B | Ä | MEU Test Report No.: 210292f Rev. A |
| Mains Harmonics | EN 61000-3-2 | Eq. Class D 3 ≤ n ≤ 40 | Power input (AC) | ≤ 4% | complied | MEU Test Report No.: 210292g Rev. A |
| Flicker | EN 61000-3-3 | d,max | Power input (AC) | Limits of EN 61000-3-3 | complied | MEU Test Report No.: 210292g Rev. A |
| EM Field | EN 61000-4-3 | 80...1000 MHz 3V/m, 80% AM horiz. & vertic. | Enclosure and connected cords | A | Ä | MEU Test Report No.: 210292c Rev. A |
| Interference Voltage | EN 55022 | 0.15 ... 30 MHz | Power input (AC) | Limits of EN 55022 Class B | complied | MEU Test Report No.: 210292a Rev. A |
| Interference Radiation | EN 55022 | Class B 30 - 1000 MHz | Enclosure 3m Testsite | Limits of EN 55022 Class B | complied | MEU Test Report No.: 210292a Rev. A |

4/19/10

Item list

- Laser lead InnoLight model: Memphis to 2000 NE

Serial No: 1907

- Laser controller Serial No: 1907

- cable between lead and controller

- manual

- datasheet

- AC cable missing

4-20-2010 Log # 2822
Data Sheet and Test Report
ZW ZA 25C

DATA:

Model: M200NE
 Noise Eater Option: Yes
 Serial No. Laser System: 1907
 Serial No. NPRO Crystal: Q143
 Serial No. Diode A: 104700 I = 2.10 A
 Serial No. Diode B: 104709 I = 2.10 A
 T = 25.00 °C
 T = 21.98 °C
 T = 23.01 °C

TEST:

Output Power @ 1064 nm: 2.09 W
 PZT tuning: 1.1 MHz/V
 Electronics: tested
 s-operation: tested
 Beam quality: tested
 Duration Test: tested

Laser Tests:

OK
 Date: 25.11.2009
 Initials: SO