

Straubing, February 19, 2008

**ANNEX A**

**to**

**TEST - REPORT**

**No. 55503-70615-3 (Edition 1)**

**for**

**Transponder module Medilas D (D30/D60)**

**Transponder module**

**Applicant:** Dornier MedTech Laser GmbH

**Test Specifications:** FCC Code of Federal Regulations,  
CFR 47, Part 15,  
Sections 15.205, 15.207 and 15.209

Industry Canada Radio Standards  
Specifications  
RSS-Gen Issue 2, Section 7.2.2 and  
RSS-210 Issue 7, Sections 2.2, 2.6  
(Category I Equipment)

**Note:**

The test data of this report is related only to the individual item which has been tested. This report shall not be reproduced except in full extent without the written approval of the testing laboratory.

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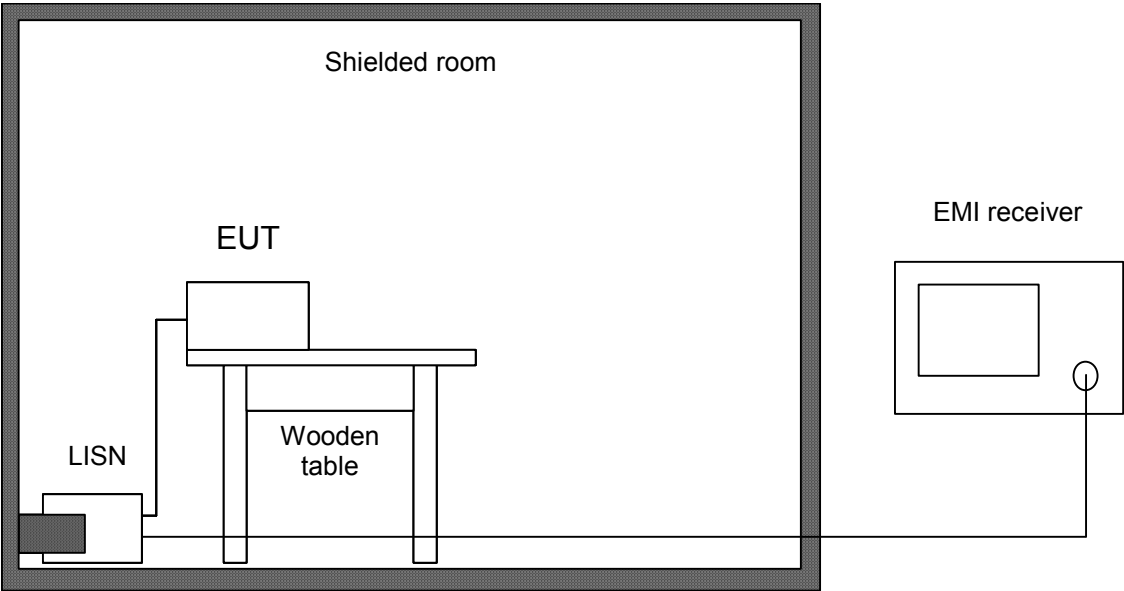
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1 Measurement Procedures

1.1 Conducted AC Powerline Emission

Measurement Procedure:	
Rules and specifications:	CFR 47 Part 15, section 15.207 IC RSS-Gen Issue 2, section 7.2.2
Guide:	ANSI C63.4 / CISPR 22
<p>Conducted emission tests in the frequency range 150 kHz to 30 MHz are performed using Line Impedance Stabilization Networks (LISNs). To simplify testing with quasi-peak and average detector the following procedure is used:</p> <p>First the whole spectrum of emission caused by the equipment under test (EUT) is recorded with detector set to peak using CISPR bandwidth of 10 kHz. After that all emission levels having less margin than 10 dB to or exceeding the average limit are retested with detector set to quasi-peak.</p> <p>If average limit is kept with quasi-peak levels no additional scan with average detector is necessary. In cases of emission levels between quasi-peak and average limit an additional scan with detector set to average is performed.</p> <p>According to ANSI C63.4, section 13.1.3.1, testing of intentional radiators with detachable antenna shall be performed using a suitable dummy load connected to the antenna output terminals. Otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended.</p> <p>Testing with dummy load may be necessary to distinguish (unintentional) conducted emissions on the supply lines from (intentional) emissions radiated by the antenna and coupling directly to supply lines and/or LISN. Usage of dummy load has to be stated in the appropriate test record(s) and notes should be added to clarify the test setup.</p>	

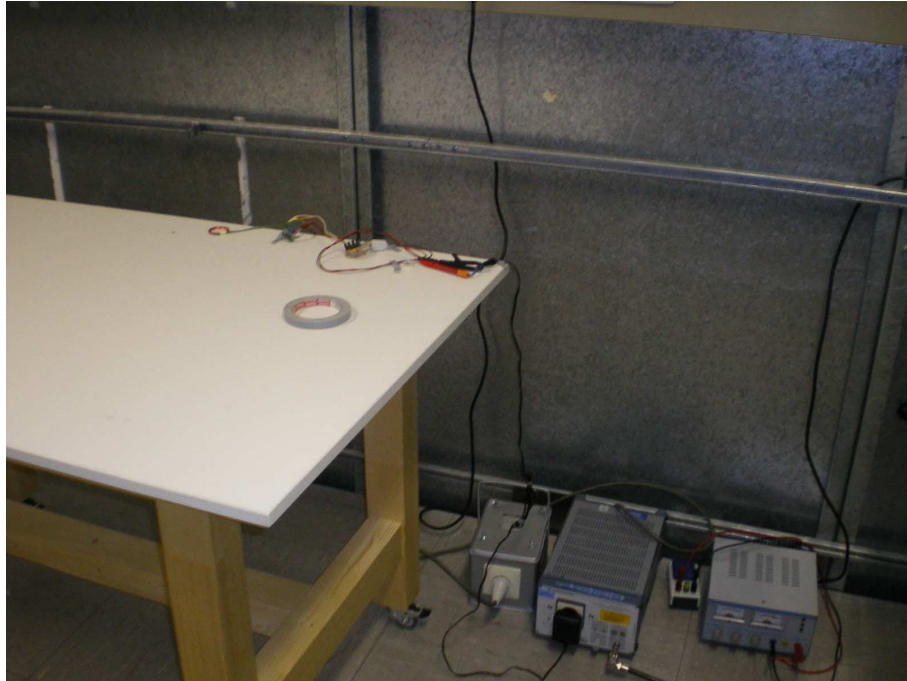


Test instruments used:

Used	Type	Model	Serial No. or ID	Manufacturer
<input checked="" type="checkbox"/>	EMI receiver	ESHS 10	860043/016	Rohde & Schwarz
<input checked="" type="checkbox"/>	LISN	ESH3-Z5	862770/021	Rohde & Schwarz
<input type="checkbox"/>	LISN	ESH3-Z5	830952/025	Rohde & Schwarz
<input type="checkbox"/>	Artificial mains network	ESH 2-Z5	842966/004	Rohde & Schwarz
<input type="checkbox"/>	Shielded room	No. 1	1451	Albatross Projects
<input checked="" type="checkbox"/>	Shielded room	No. 4	3FD-100 544	Euroshield

## **2      Photographs Taken During Testing**

**Test setup for AC conducted emission measurement 150 kHz – 30 MHz**



### 3 Test Results

FCC CFR 47 Parts 2 and 15			
Section(s)	Test	Page	Result
15.207	Conducted AC powerline emission 150 kHz to 30 MHz	---	Test passed

IC RSS-Gen Issue 2			
Section(s)	Test	Page	Result
7.2.2	Transmitter AC power lines conducted emissions 150 kHz to 30 MHz	---	Test passed

### 3.1 Conducted Powerline Emission Measurement 150 kHz to 30 MHz

Rules and specifications:	CFR 47 Part 15, section 15.207 IC RSS-Gen Issue 2, section 7.2.2		
Guide:	ANSI C63.4 / CISPR 22		
Limit:	Frequency of Emission (MHz)	Conducted Limit (dBµV)	
		Quasi-peak	Average
	0.15 - 0.5	66 to 56	56 to 46
	0.5 - 5	56	46
	5 - 30	60	50
Measurement procedure:	Conducted AC Powerline Emission (1.1)		

Comment:	with FWGB AC/DC adapter FW7650/05
Date of test:	02/18/2008
Test site:	Shielded room, cabin no. 4

Test Result:	Test passed
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Tested on:	Linecord AC 110 V, Phase L1
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Frequency (MHz)	Detector	Reading Value (dBµV)	Correction Factor (dB)	Final Value (dBµV)	Limit (dBµV)	Margin (dB)
0.15 - 30	Peak	Margin to average limit > 10 dB				

Tested on:	Linecord AC 110 V, Phase N
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Frequency (MHz)	Detector	Reading Value (dBµV)	Correction Factor (dB)	Final Value (dBµV)	Limit (dBµV)	Margin (dB)
0.15 - 30	Peak	Margin to average limit > 10 dB				

#### Sample calculation of final values:

$$\text{Final Value (dBµV)} = \text{Reading Value (dBµV)} + \text{Correction Factor (dB)}$$



#### 4 Revision History

Revision History			
<i>Edition</i>	<i>Date</i>	<i>Issued by</i>	<i>Modifications</i>
1	02/19/2008	R. Heller	First Edition

## **5 Charts taken during testing**

# Conducted Emission Test 150 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:  
Transponder module Medilas D (D30/D60)

Serial no.:  
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Applicant:  
Dornier MedTech Laser GmbH

Test site:  
Shielded room, cabin no. 4

Tested on:  
Linecord AC 110 V  
Phase L1

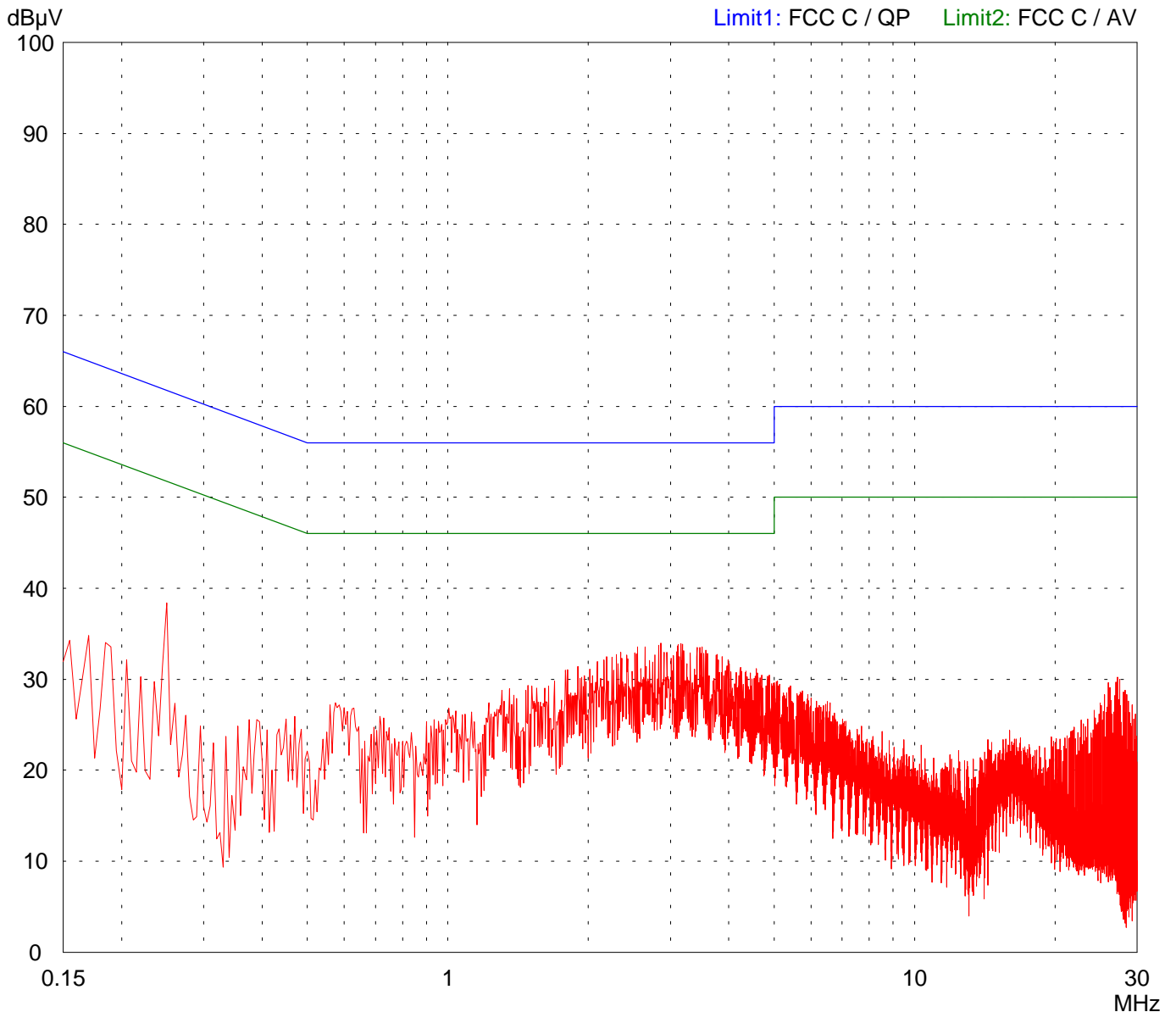
Date of test: 02/18/2008      Operator: M. Steindl

Test performed: automatically      File name:

Mode:  
- AC 110 V power supply  
  
- with FWGB AC/DC adapter  
FW7650/05  
  
- transmitting continuously

Detector:  
Peak / Final Results: QP

Final results:  
20 dB Margin      25 Subranges



Result:  
Limit kept

Project file:  
50444-070615-3

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# Conducted Emission Test 150 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:  
Transponder module Medilas D (D30/D60)

Serial no.:  
---

Applicant:  
Dornier MedTech Laser GmbH

Test site:  
Shielded room, cabin no. 4

Tested on:  
Linecord AC 110 V  
Phase N

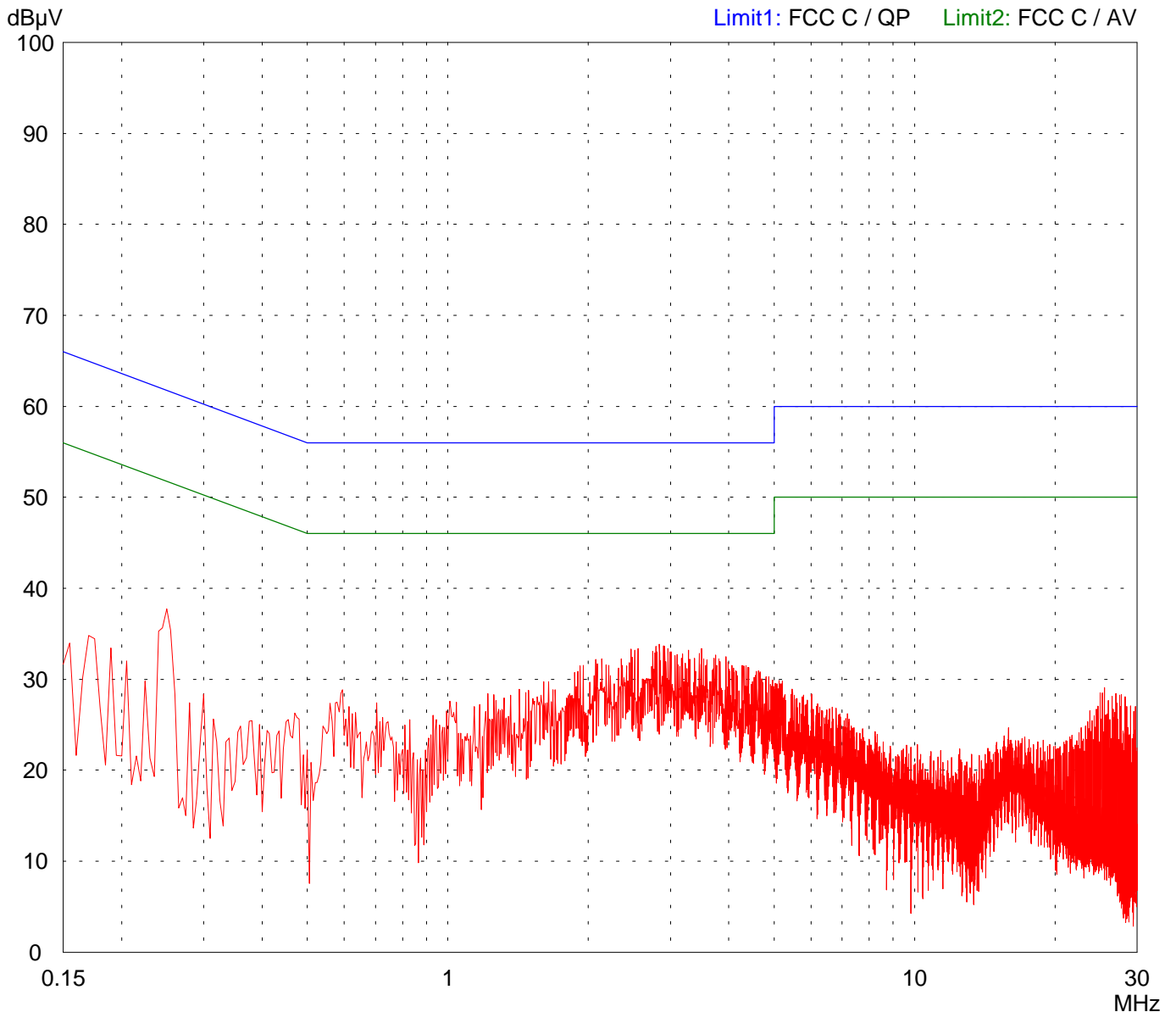
Date of test: 02/18/2008      Operator: M. Steindl

Test performed: automatically      File name:

Mode:  
- AC 110 V power supply  
  
- with FWGB AC/DC adapter  
FW7650/05  
  
- transmitting continuously

Detector:  
Peak / Final Results: QP

Final results:  
20 dB Margin      25 Subranges



Result:  
Limit kept

Project file:  
50444-070615-3

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