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## TEST REPORT

REPORT NO : 2019MA0354	PAGE : 1 OF 24
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### THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant : ECOCLEAN TECHNOLOGY SDN.BHD.  
12A-03, Wisma Zelan,  
Jalan Tasik Permaisuri 2,  
Bandar Tun Razak, Cheras,  
56000 Kuala Lumpur,  
Malaysia.

Manufacturer : Same as above.

Product : ECOCLEAN ENVIROMODULE

Reference Standard / Method of Test : Manufacturer's Specification

Description of sample / Description of Test Specimen : Trademark(s)/Brand: AUSDRAIN  
Serial Number: NA  
Quantity: 3 units each model

Date Received of Complete Application : 21 March 2019

Job No. : J20191390289

Description of Test Results / Overall Test Result : The test results for the submitted test samples are described in Page 2 of this test report.

Issued Date : 03 April 2019

Approved Signatories;

(MOHD FAUZELY BIN MUSTAPA BAKARI)  
Testing Executive



(MOHD FAIZAR BIN MUSTAFA)  
Head  
Mechanical & Automotive Section  
Testing Services Department

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**TEST RESULTS:**

Tests	Measurement Units	Observations / Results		
		3 Partitions	4 Partitions	5 Partitions
1. Toughness Test using 120mm x 120mm footprint pad.  Ultimate Compressive Load.	Load: kgf	234.2	578.2	624.5
	Deflection: cm	1.62	1.13	1.27
2. Toughness Test by uniformly distributed load.  Ultimate Compressive Load.	Load: kgf	5551	5858	7516
	Deflection: cm	0.98	0.99	1.11
3. Fatigue Strength ( 5 cycles )  a). Deflection (After 5 cycles of 4000kg in 10s duration per cycle).  b). percentage of deformation	peak force	4000	4000	4000
	Load: kgf			
	deflection at peak force: cm	0.51	0.48	0.49
	%	0.33	0.22	0.22



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### Photograph of Test Sample

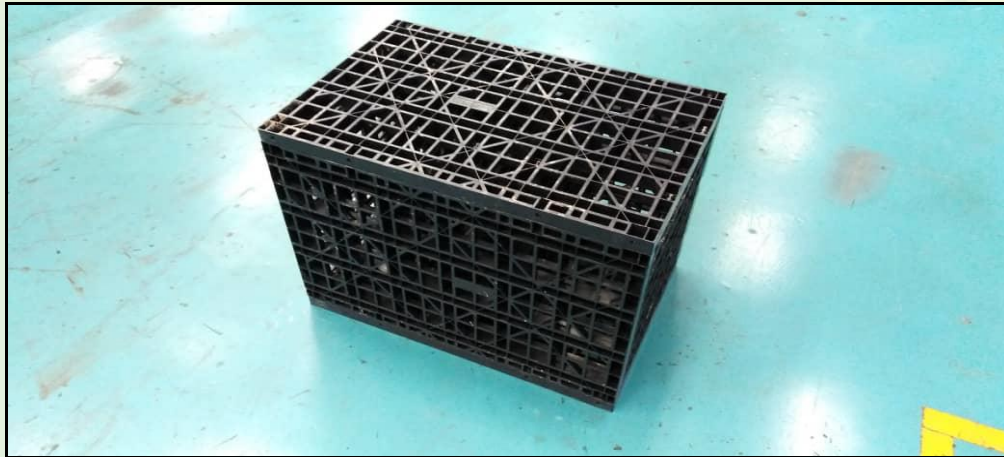


Figure 1: Drainage Module for 3 partitions, 4 partitions and 5 partitions.



Figure 2: Toughness Test using 120mm x 120mm footprint pad



Figure 3: Toughness Test and Fatigue Strength Test

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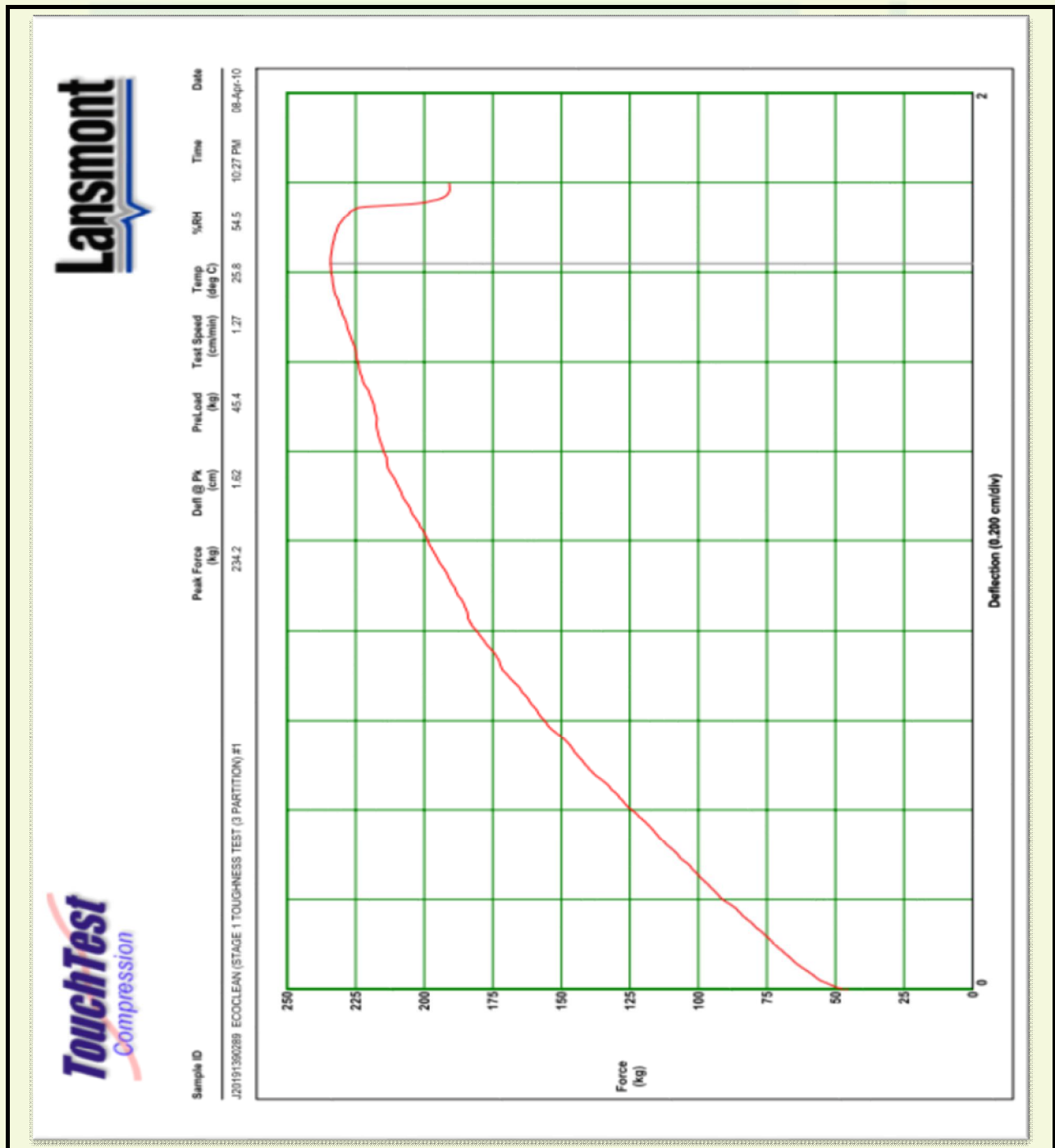


Figure 4: Toughness test graph using 20mm x 120mm footprint pad  
(8 partitions)





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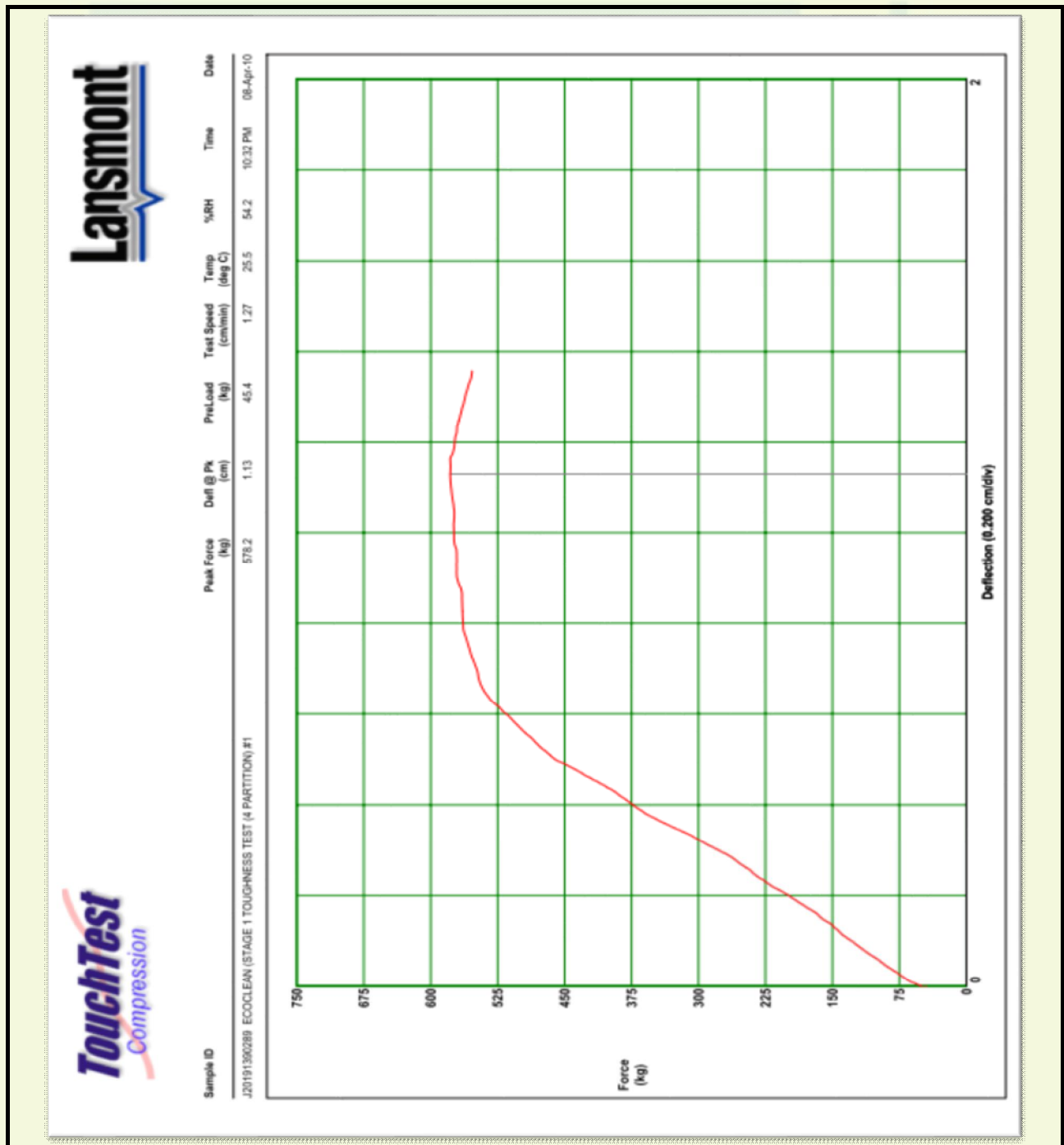


Figure 5: Toughness test result using 120mm x 120mm footprint pad



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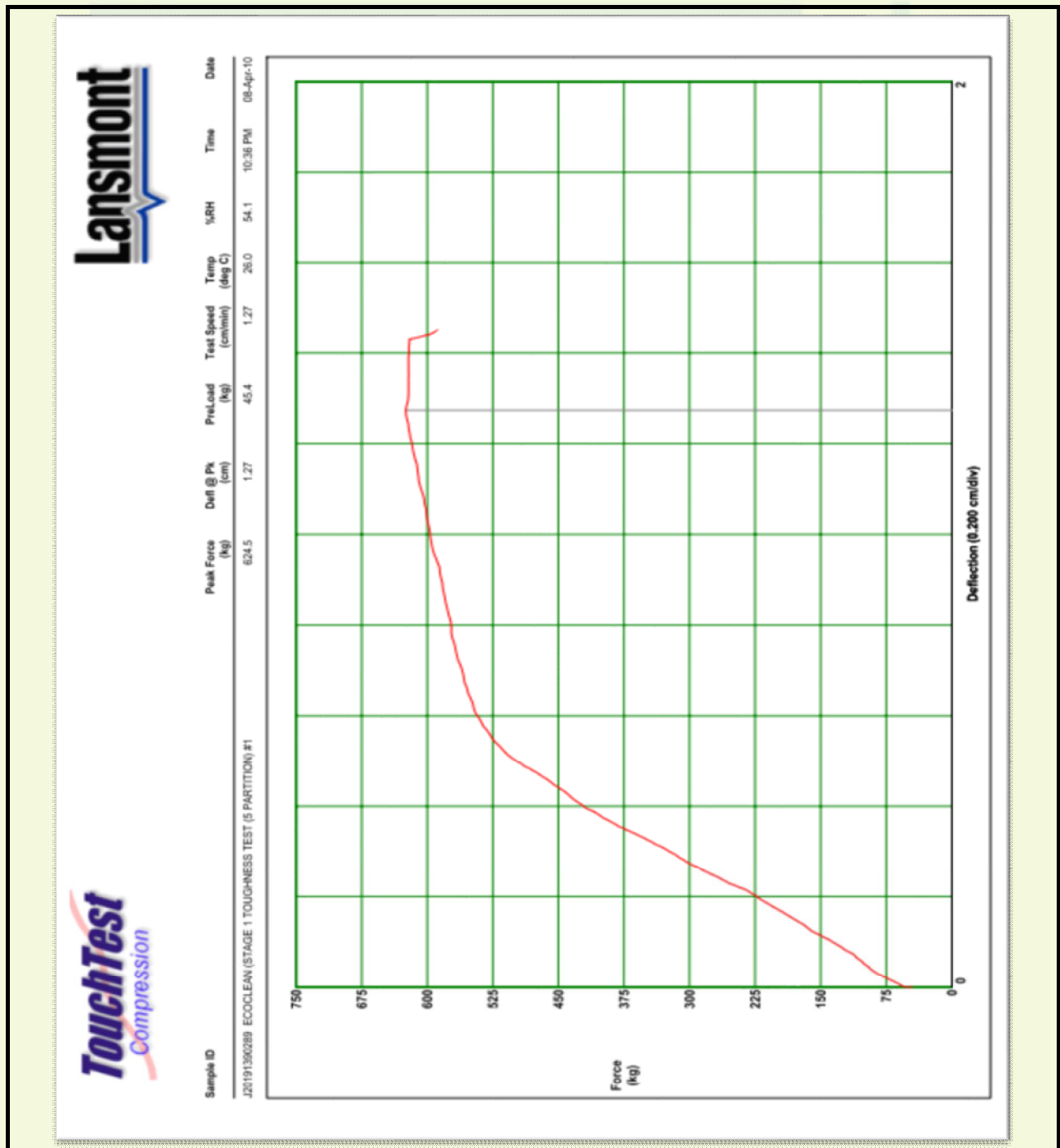


Figure 6: Toughness test result using 120mm x 120mm footprint pad



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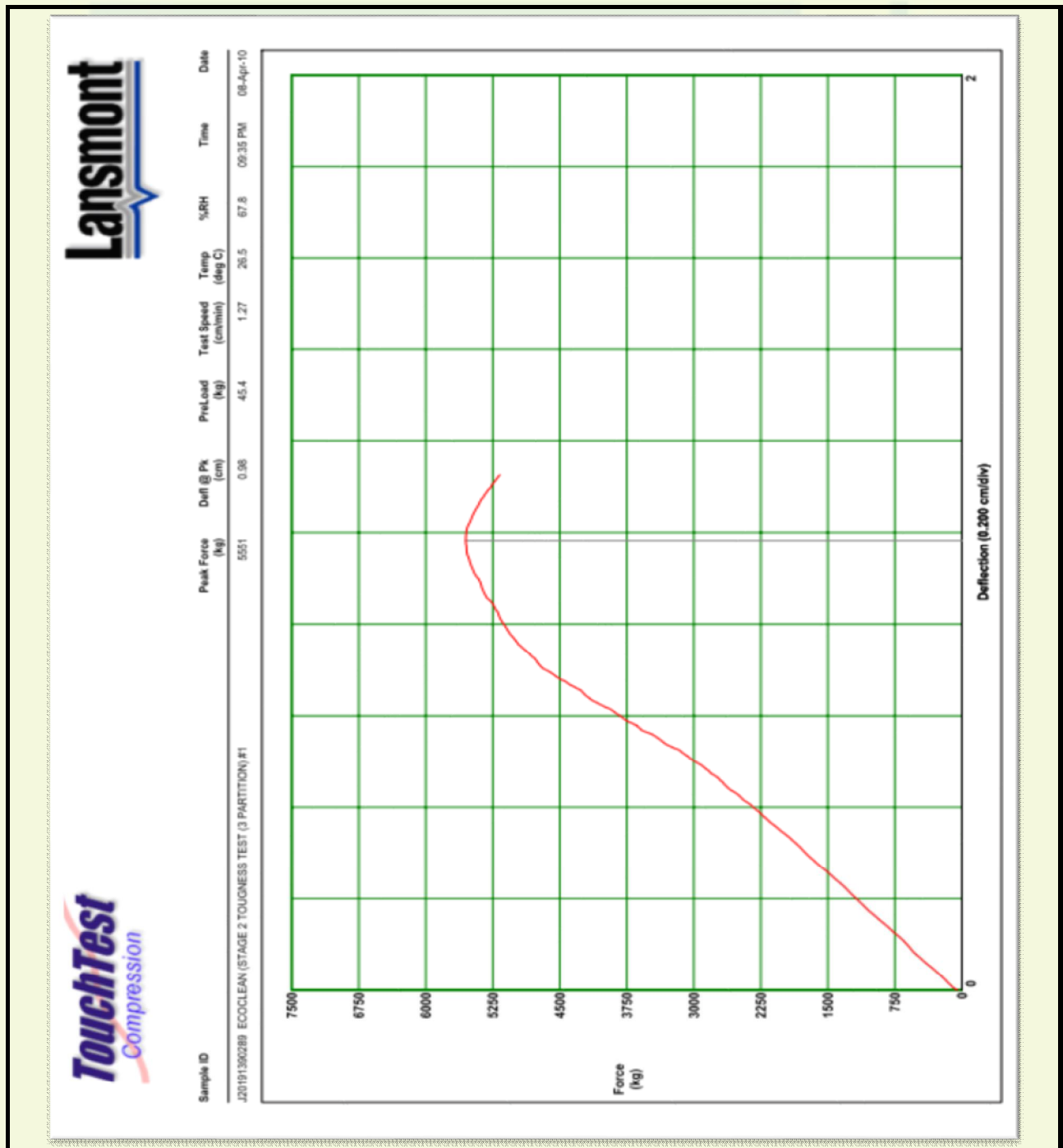


Figure 7: Toughness test graph by uniformly distributed  
(3 partitions)



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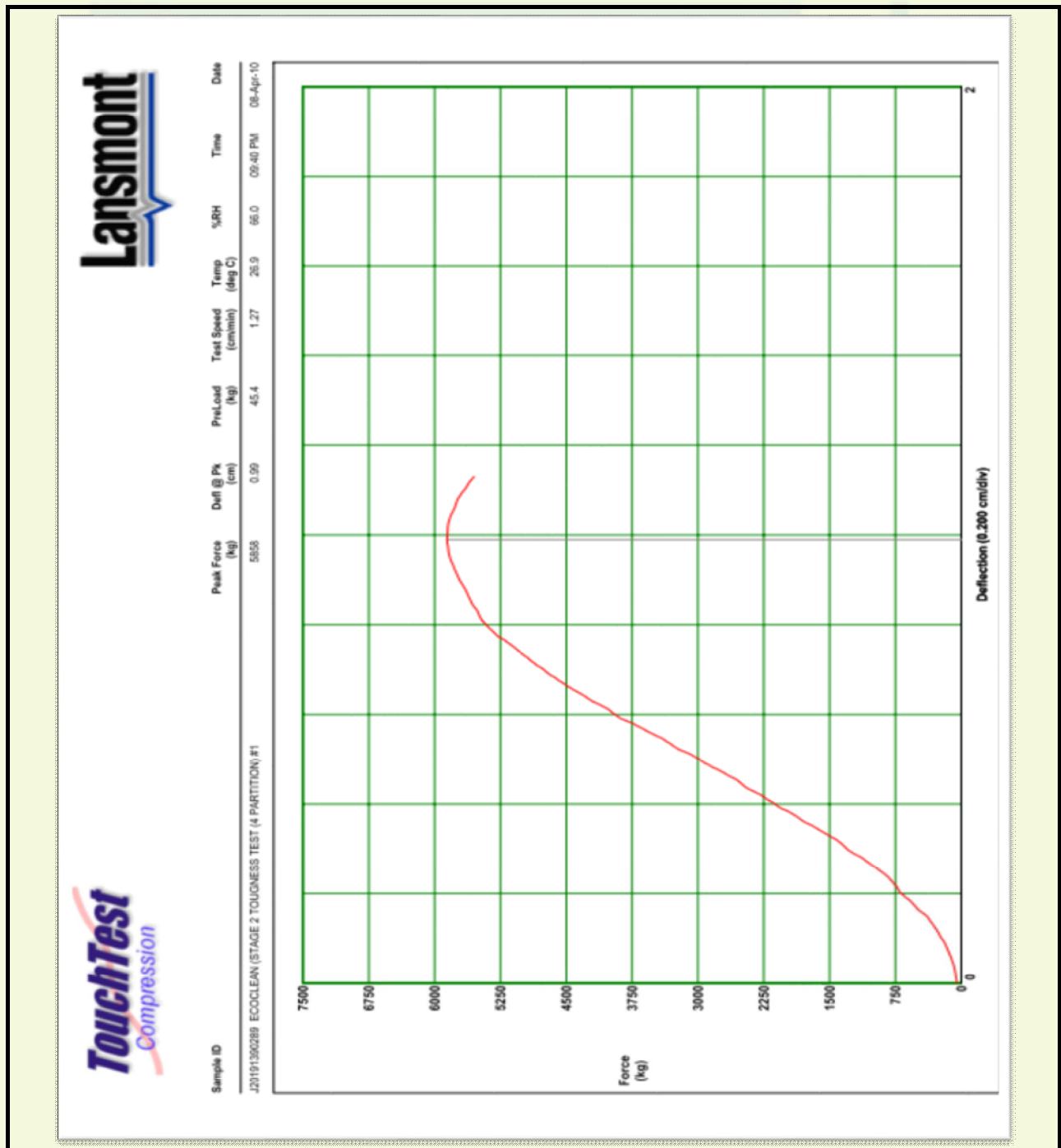


Figure 8: Toughness test graph by uniformly distributed (4 partitions)





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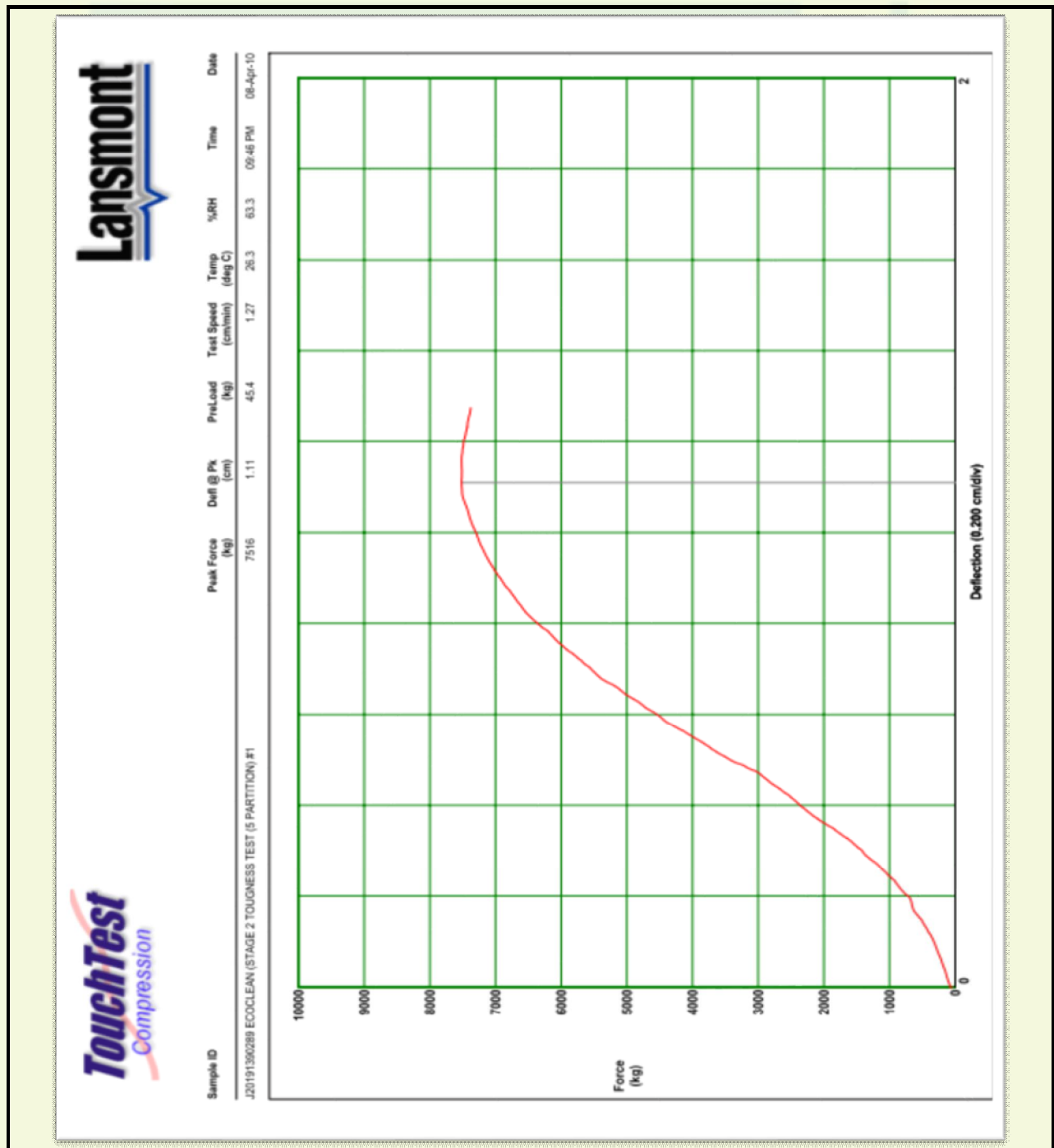


Figure 9: Toughness test graph by uniformly distributed (5 partitions)



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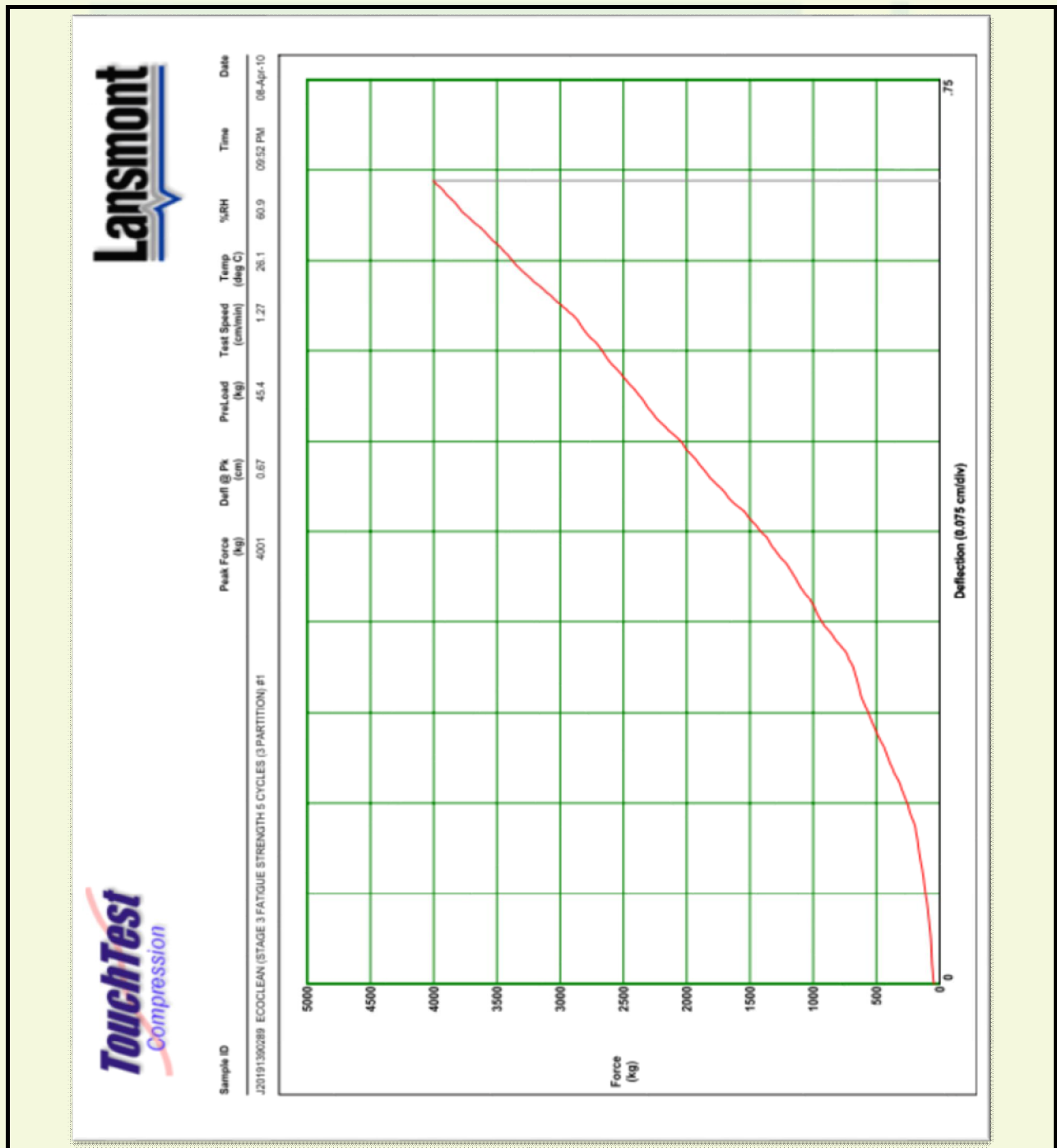


Figure 10: Fatigue Strength Test Graph for uniformly distributed 1<sup>st</sup> Cycle  
(3 partitions)



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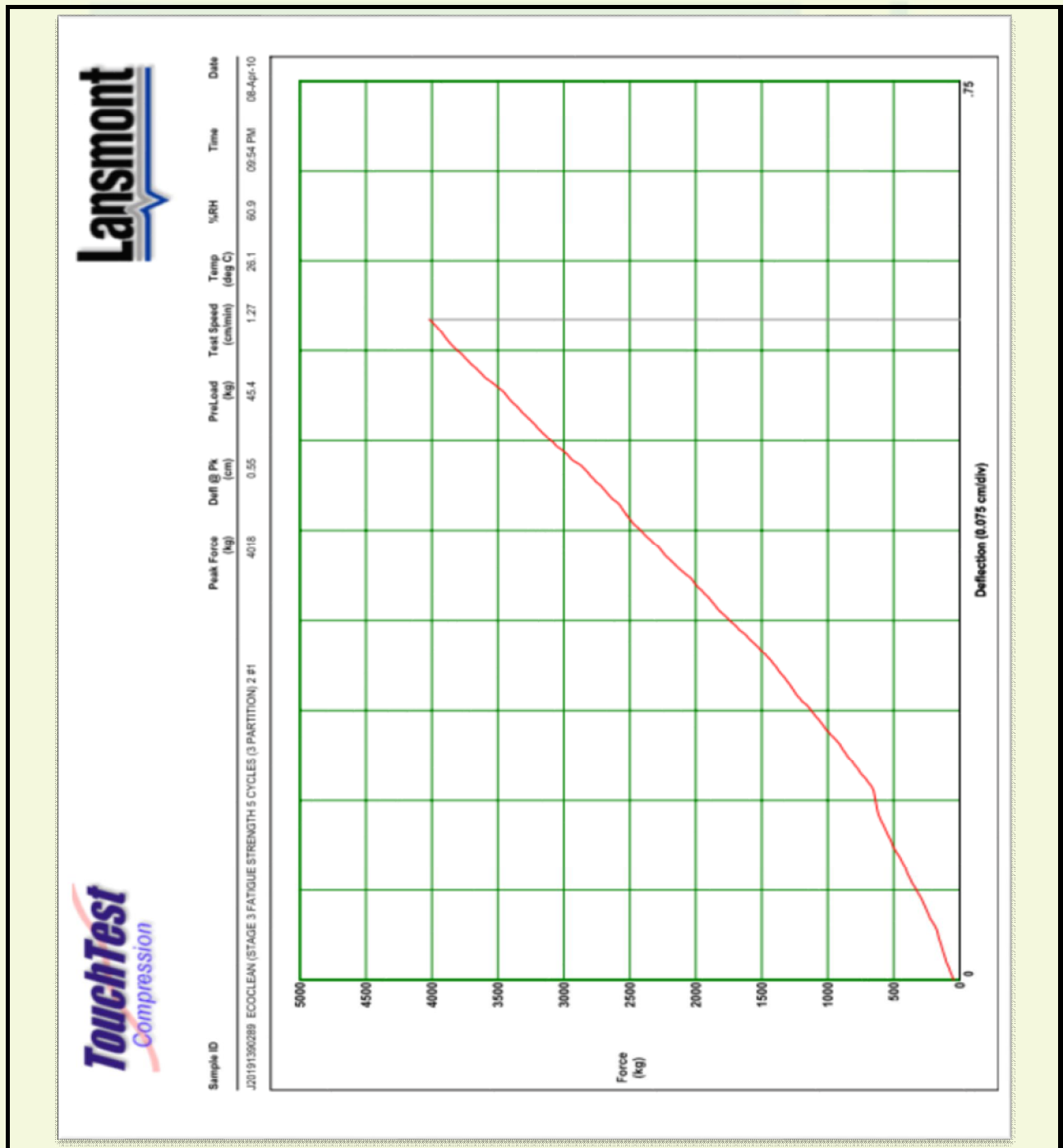


Figure 11: Fatigue Strength test result by uniformly distributed 2<sup>nd</sup> Cycles  
(3 partitions)



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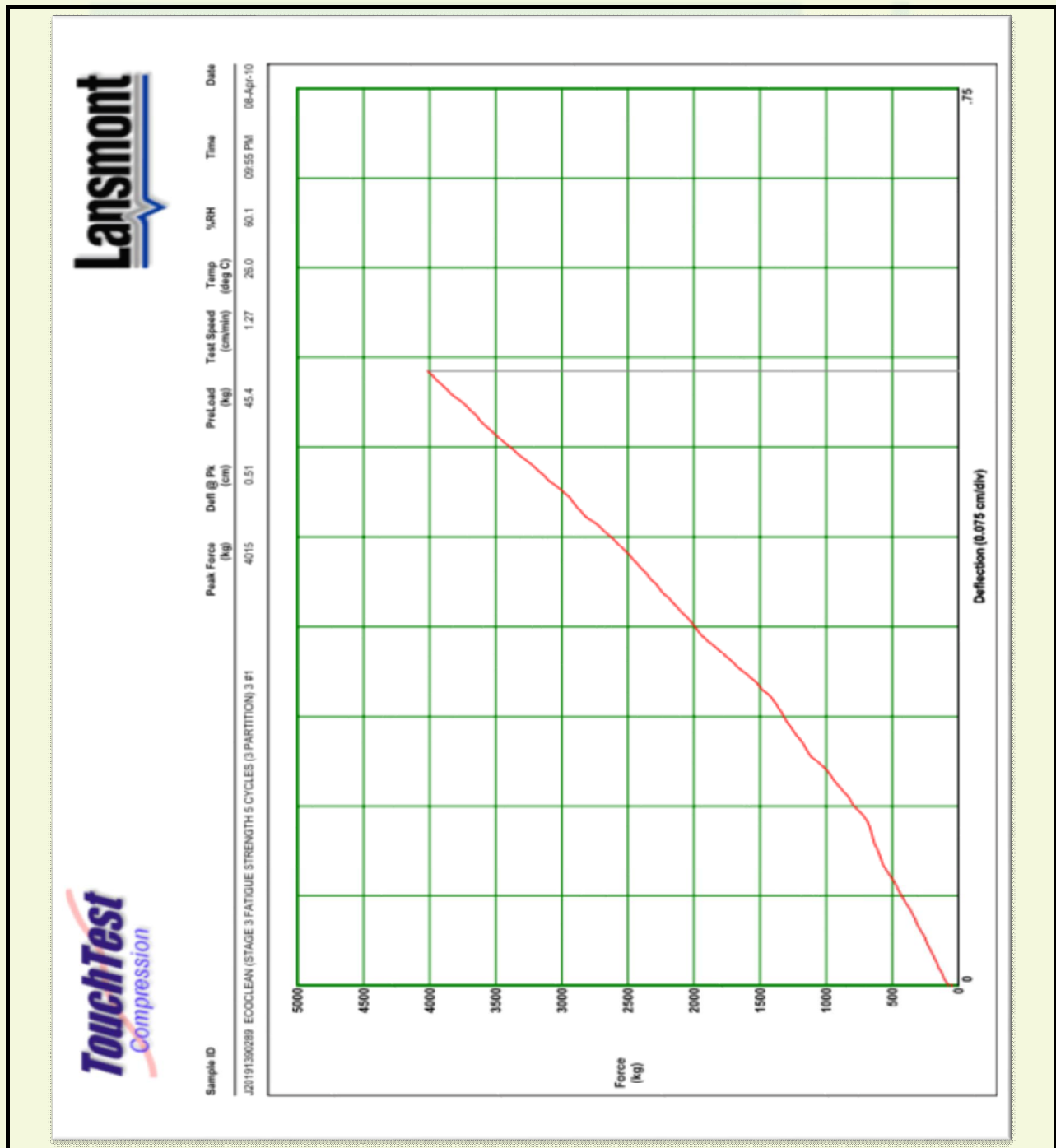


Figure 12: Fatigue Strength Test graph by uniformly distributed 3<sup>rd</sup> Cycles  
(3 partitions)



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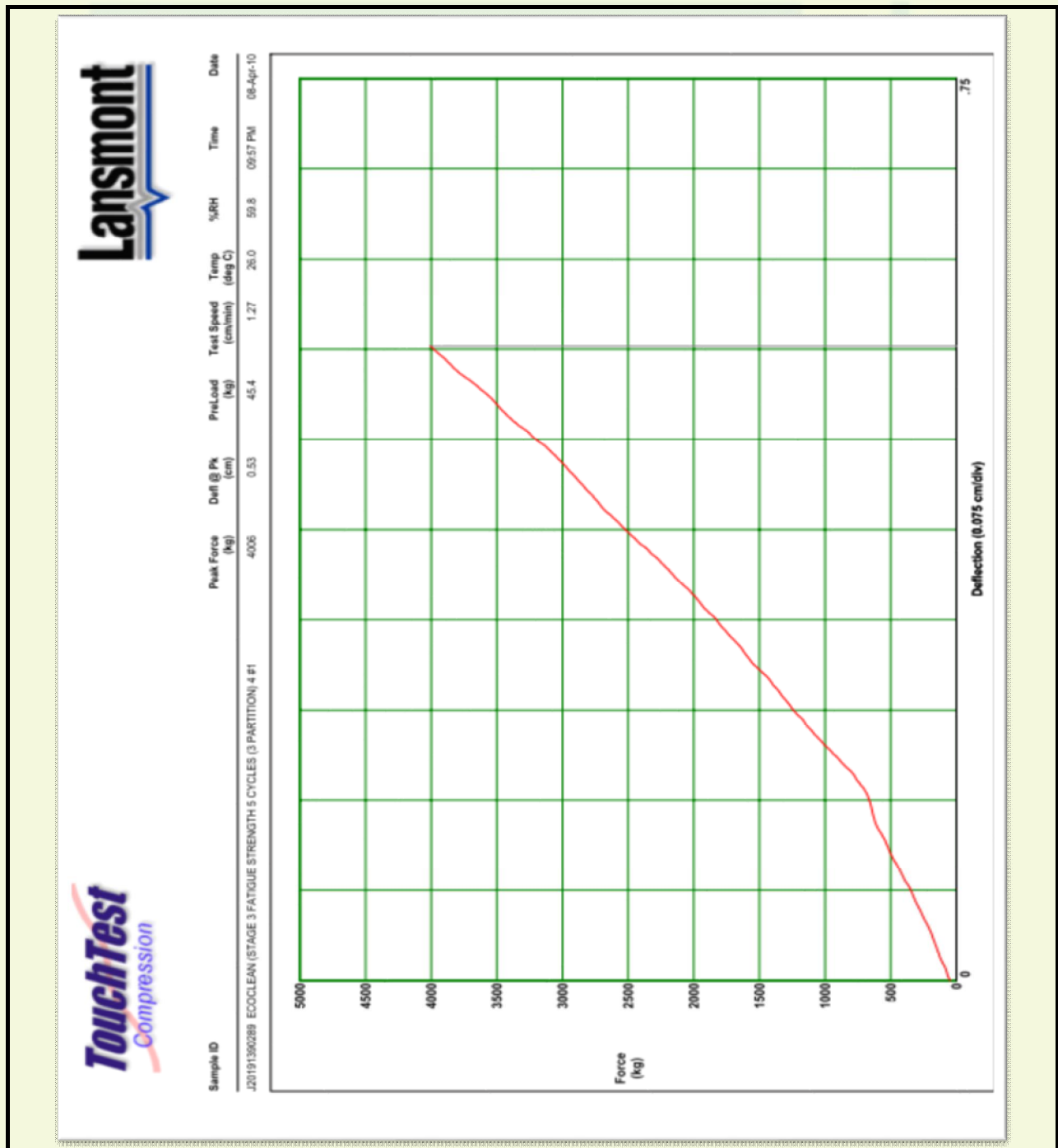


Figure 13: Fatigue Strength test graph by uniformly distributed 4<sup>th</sup> Cycles





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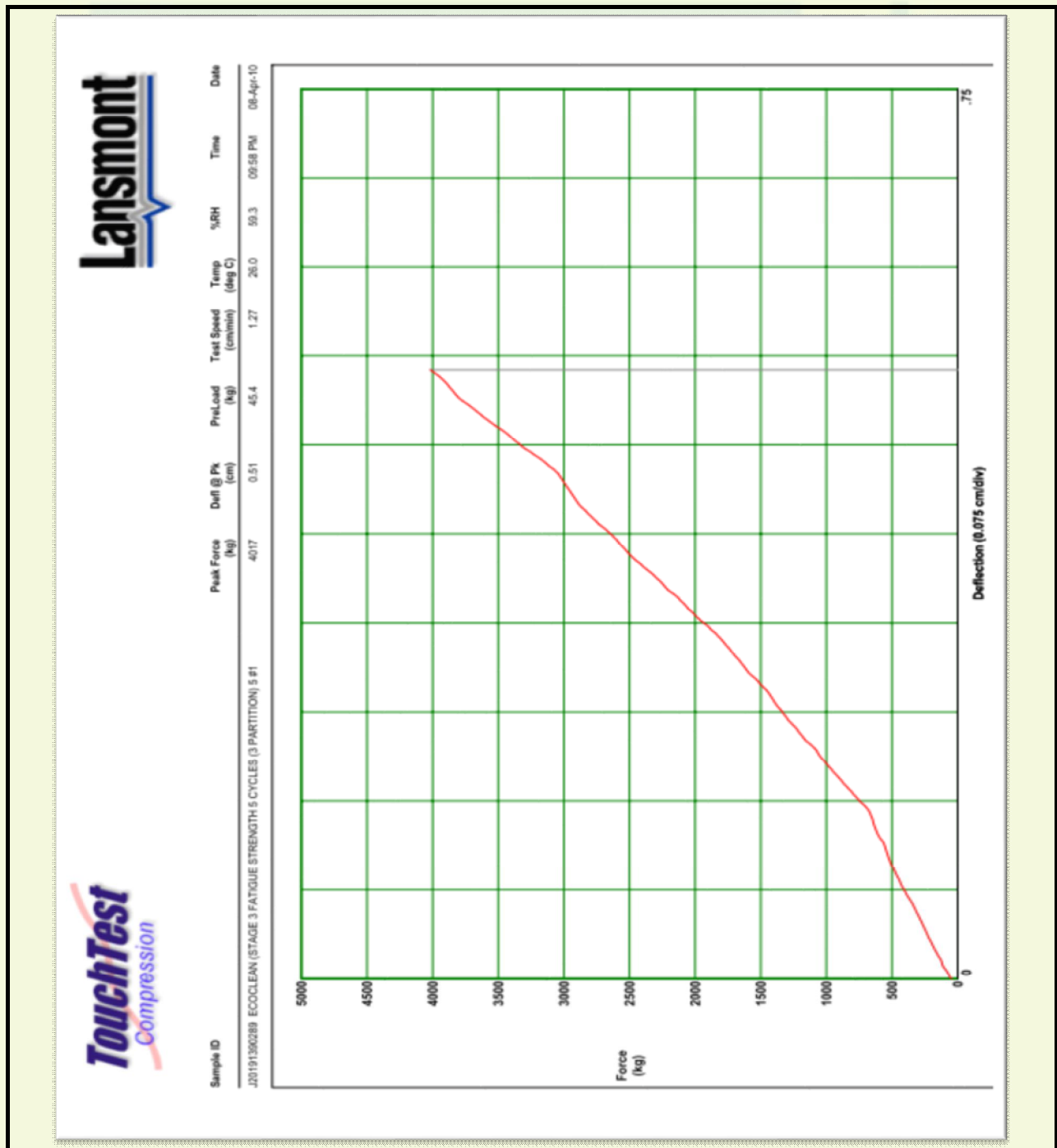


Figure 14: Fatigue Strength Test at 0.075 cm/div by uniformly distributed 5<sup>th</sup> Cycles (3 partitions)



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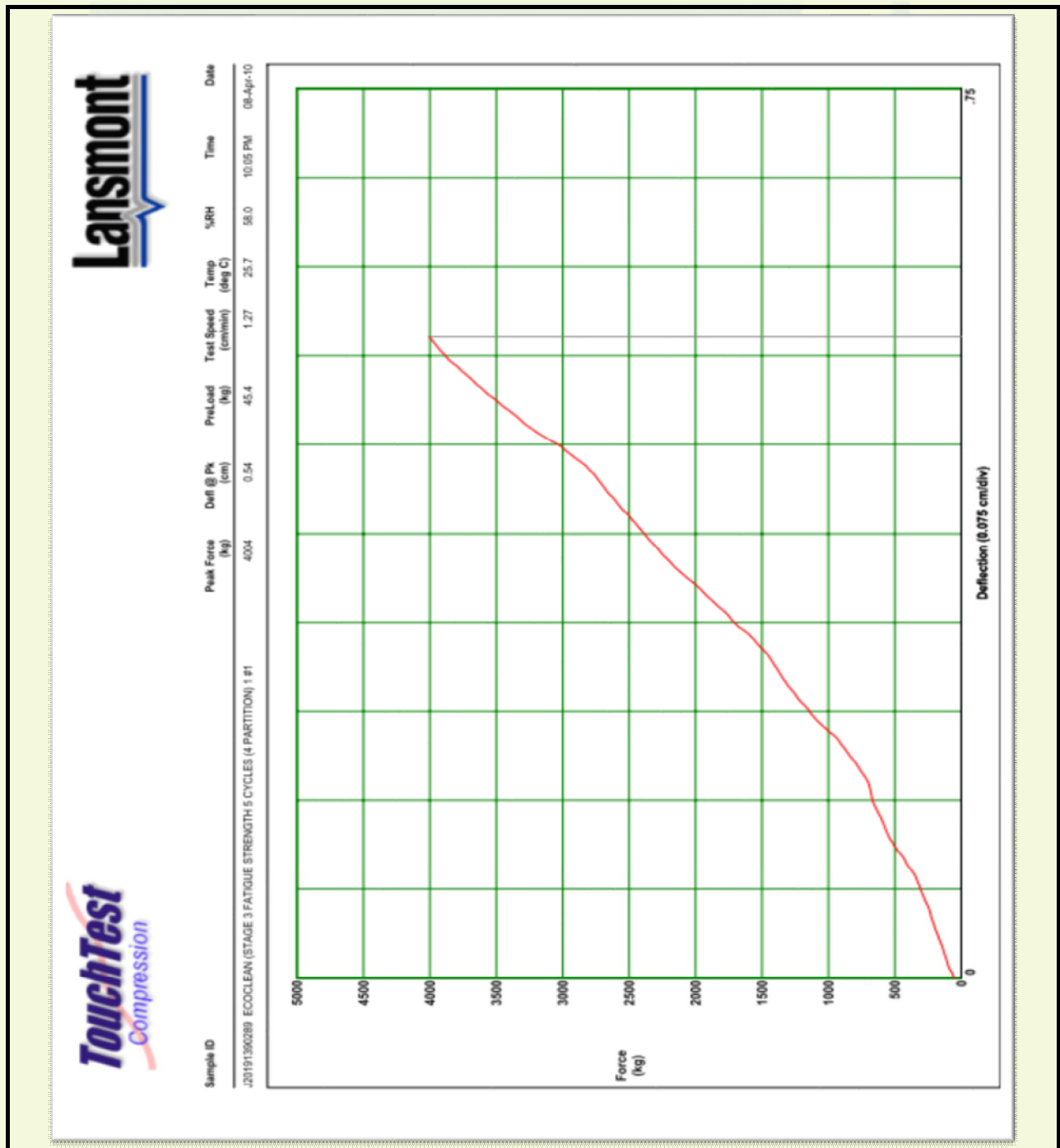


Figure 15: Fatigue Strength test graph by uniformly distributed 1<sup>st</sup> Cycle (4 partitions)



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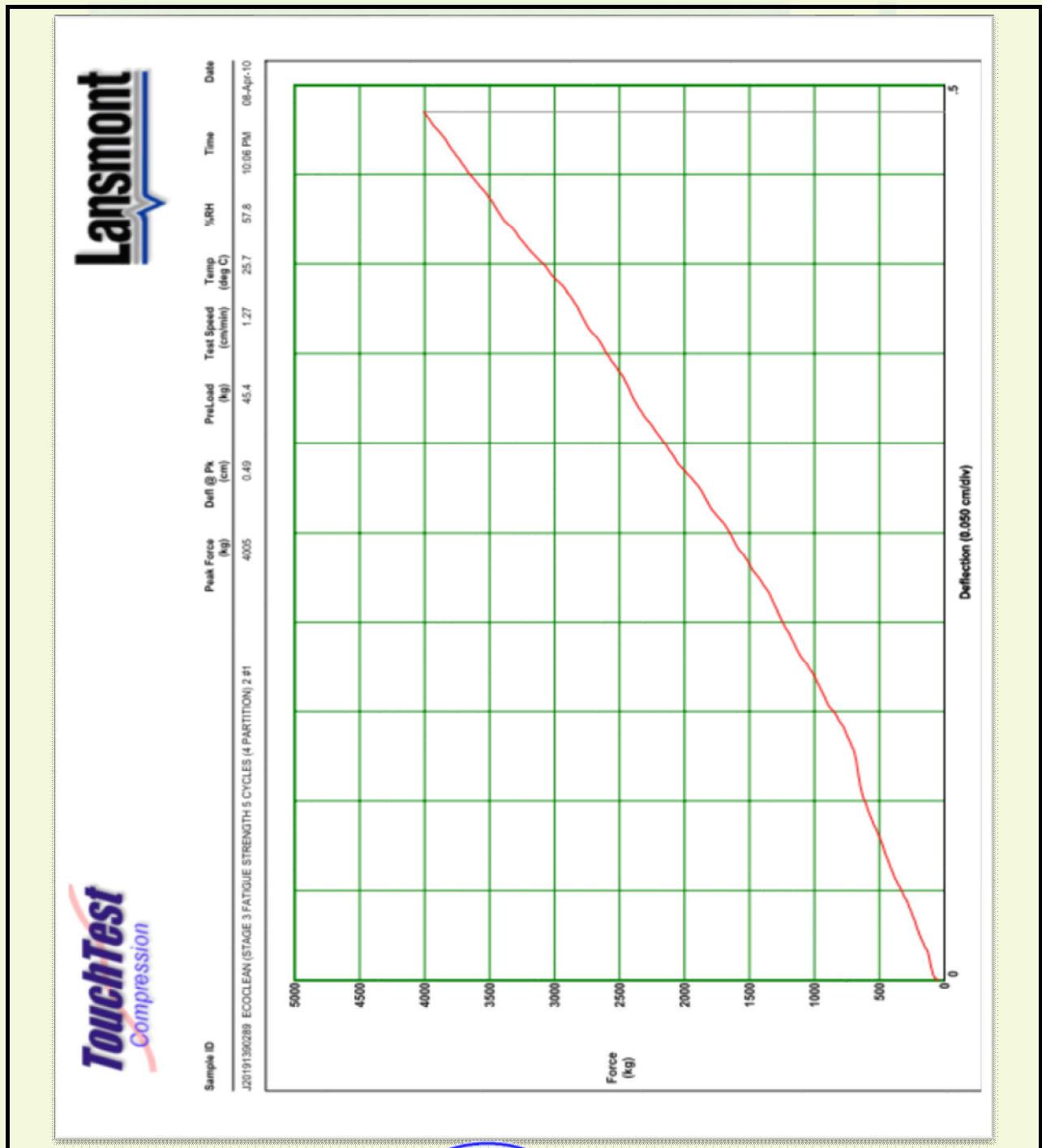


Figure 16: Fatigue Strength test graph by uniformly distributed 2<sup>nd</sup> Cycles



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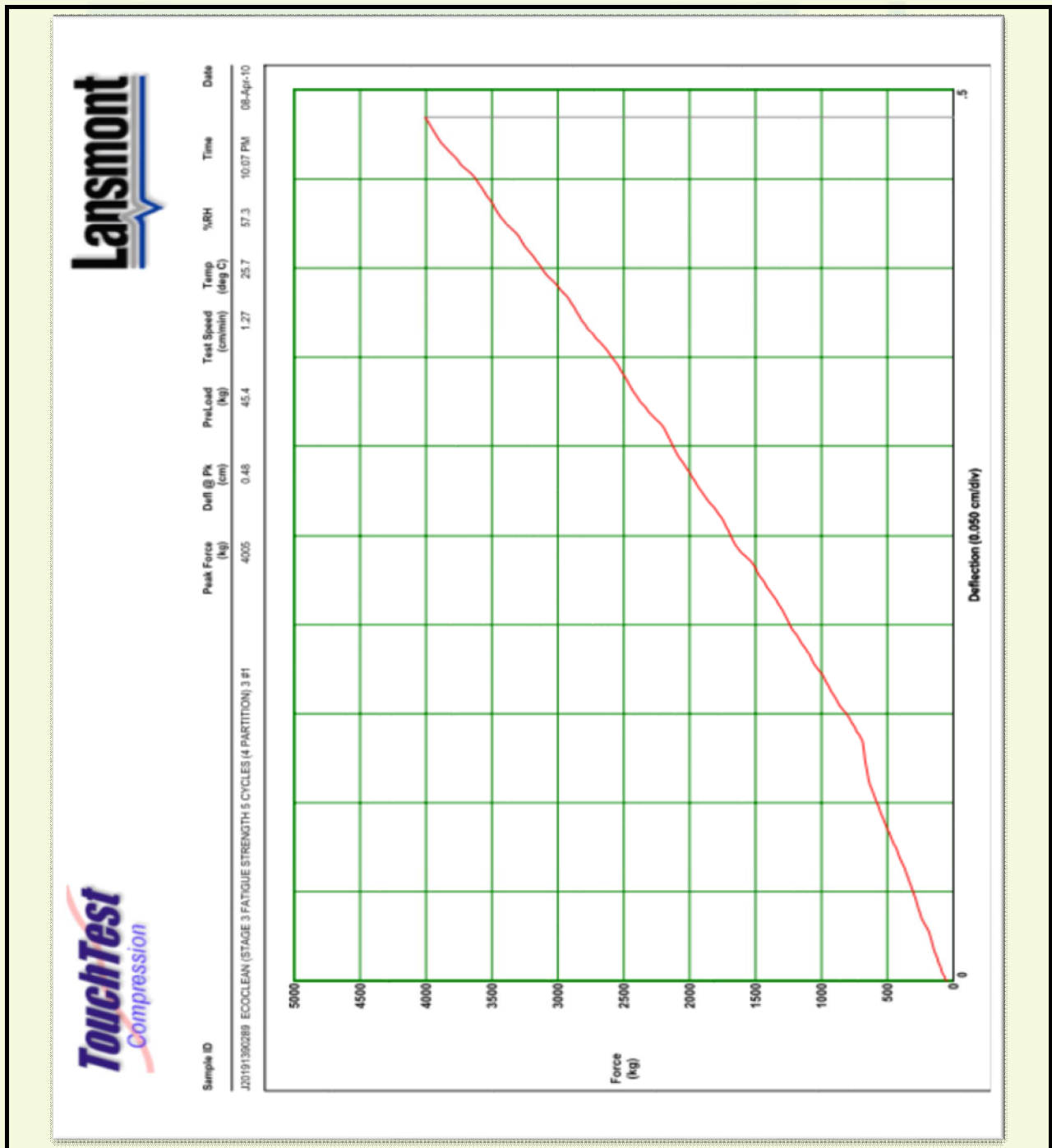


Figure 17: Fatigue Strength Test 3<sup>rd</sup> Cycles (4 partitions)



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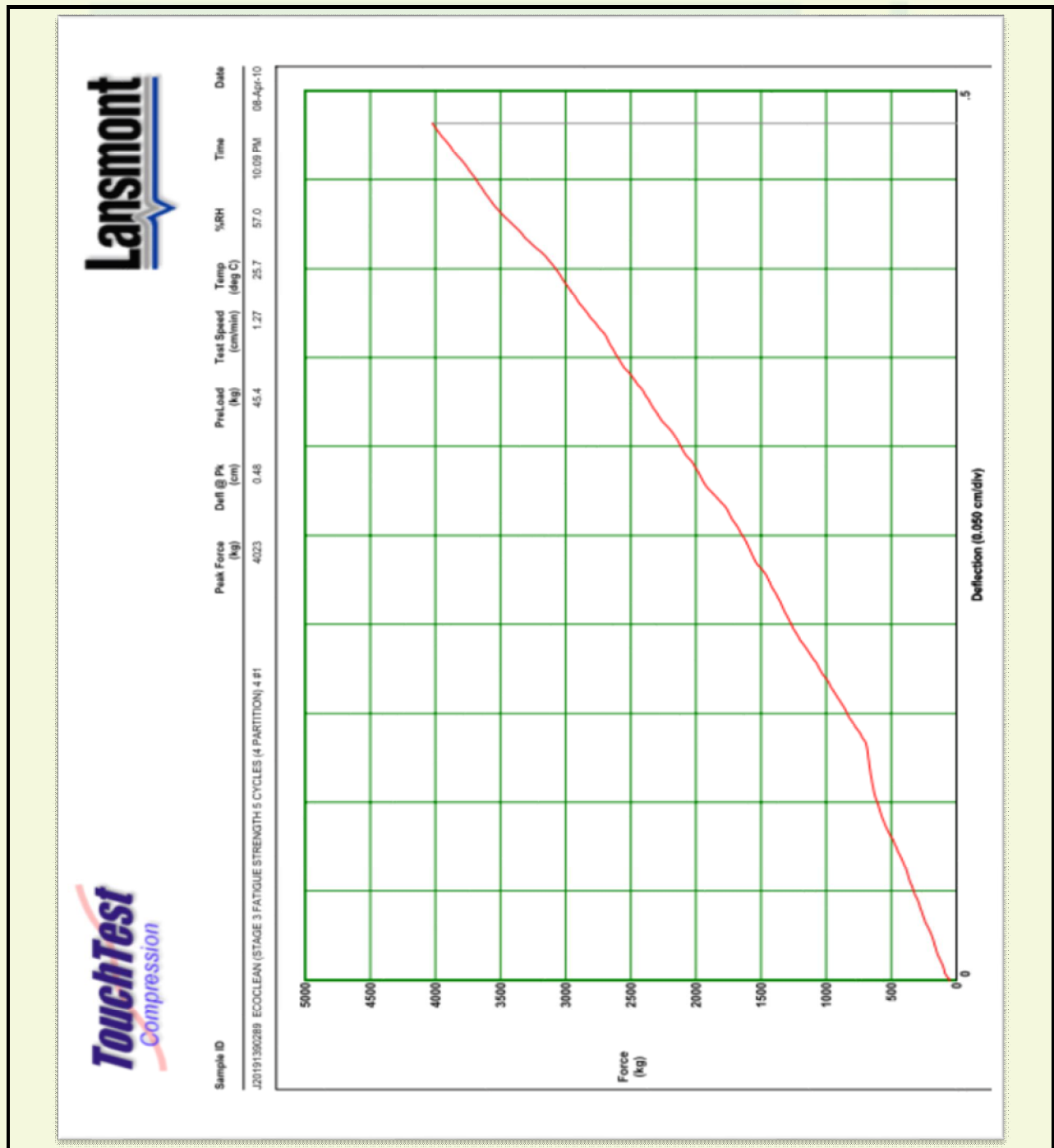


Figure 18: Fatigue Strength test graph by uniformly distributed 4<sup>th</sup> Cycles (4 partitions)





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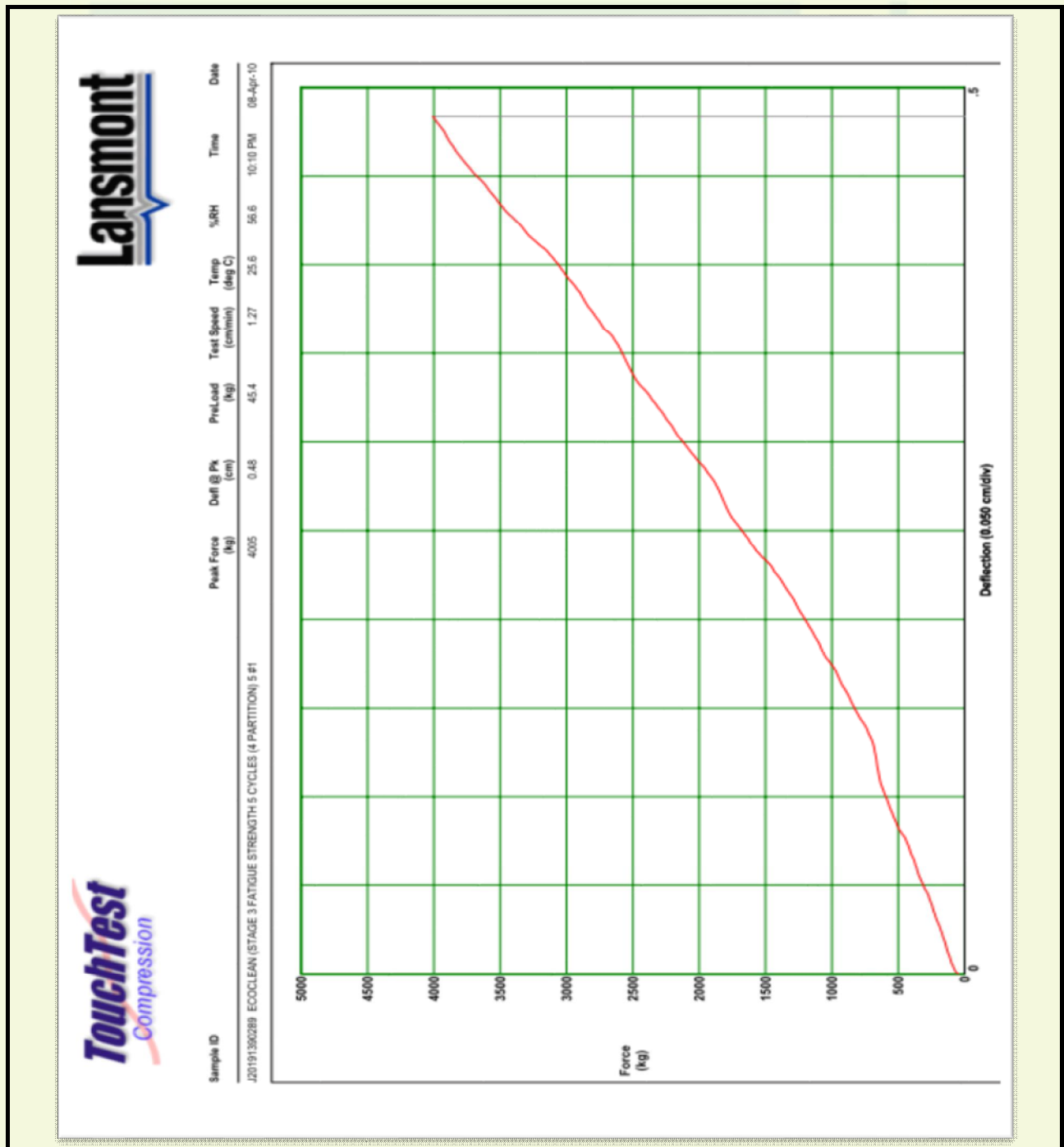


Figure 19: Fatigue Strength test graph by uniformly distributed 5<sup>th</sup> Cycles  
(4 partitions)



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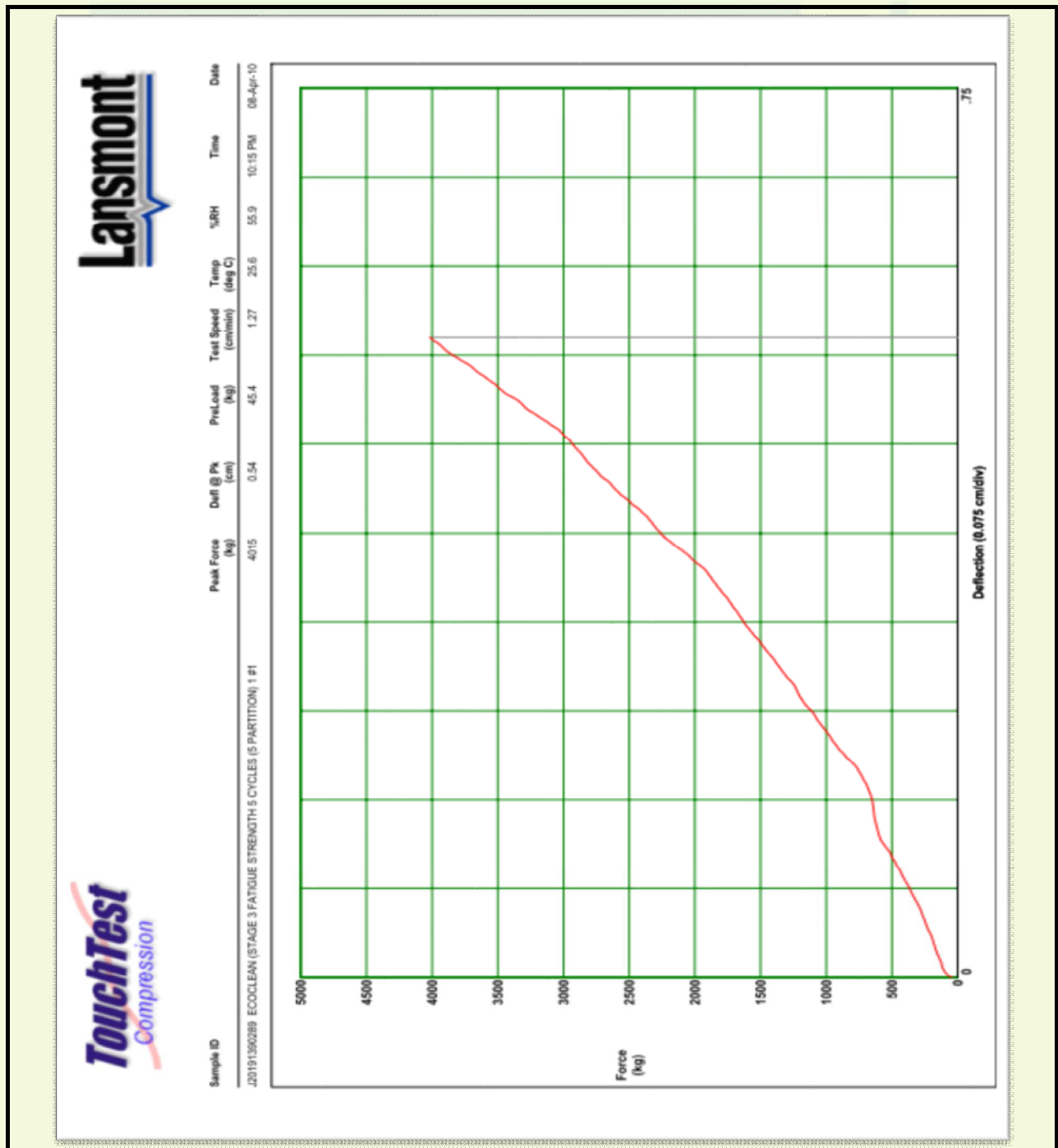


Figure 20: Fatigue Strength Test Graph by uniformly distributed 1<sup>st</sup> Cycle  
(6 partitions)



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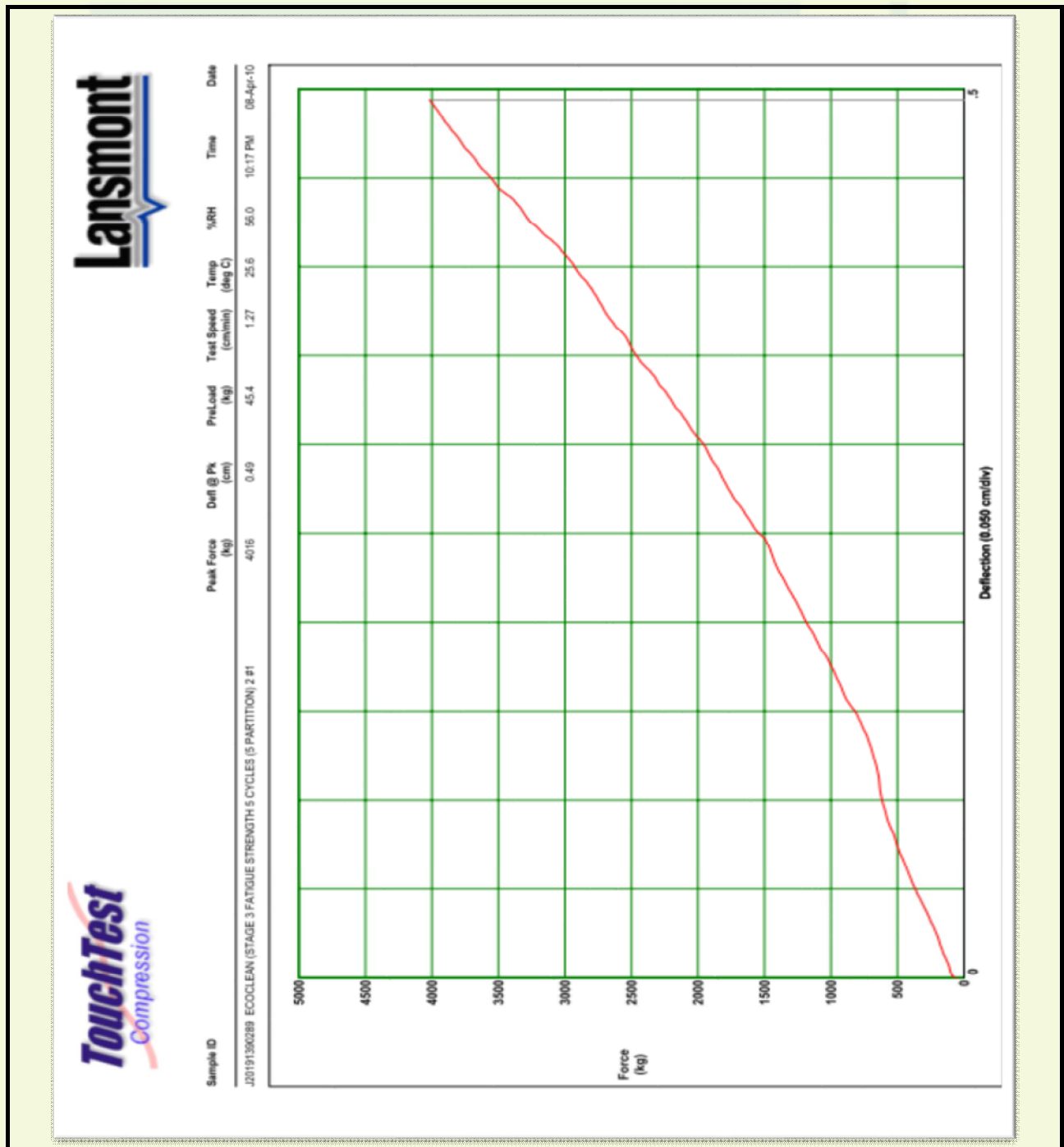


Figure 21: Fatigue Strength 1st Union by uniformly distributed 2<sup>nd</sup> Cycles  
(5 partitions)



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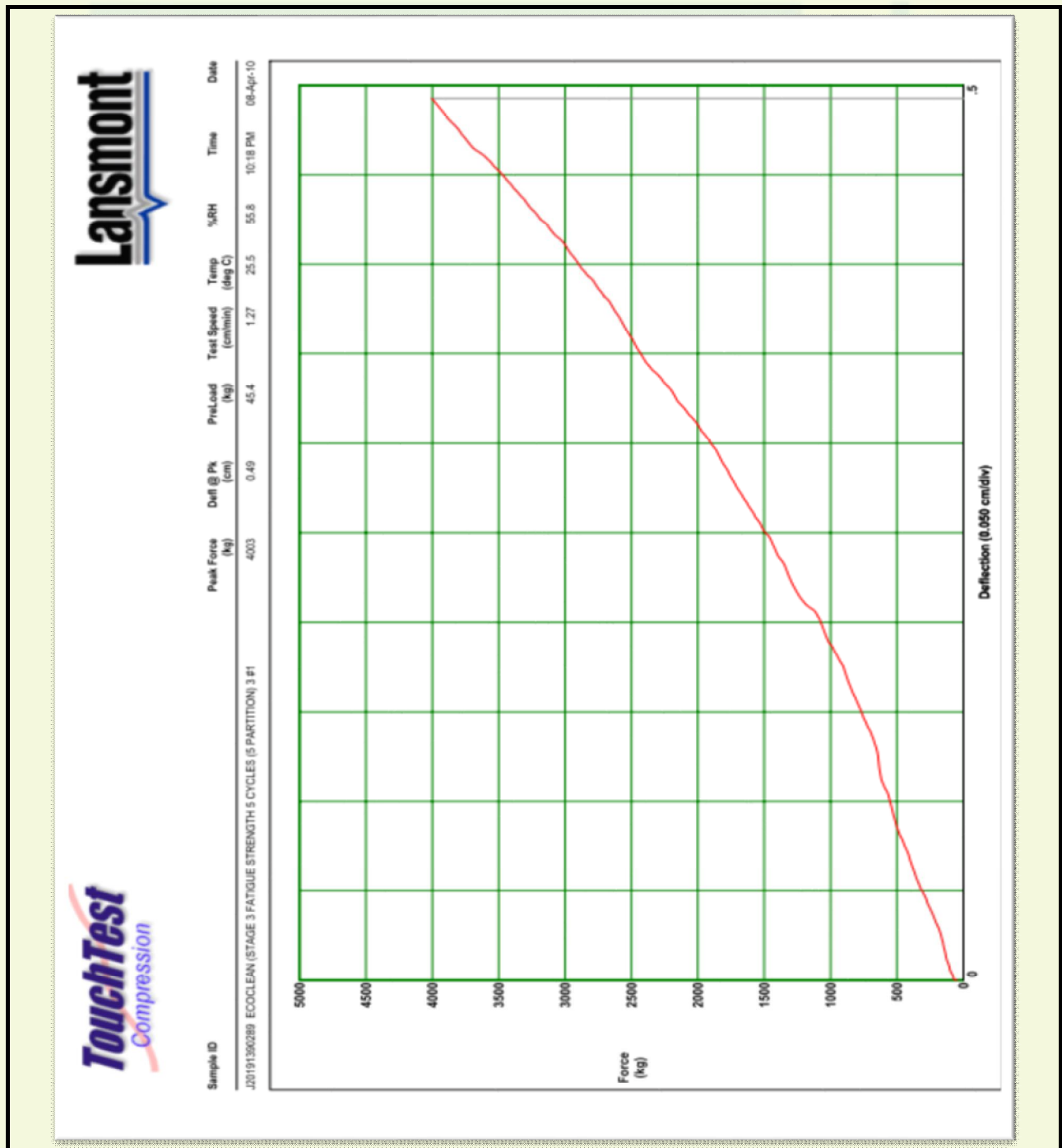


Figure 22: Fatigue Strength Test of 3<sup>rd</sup> Cycles (5 partitions)



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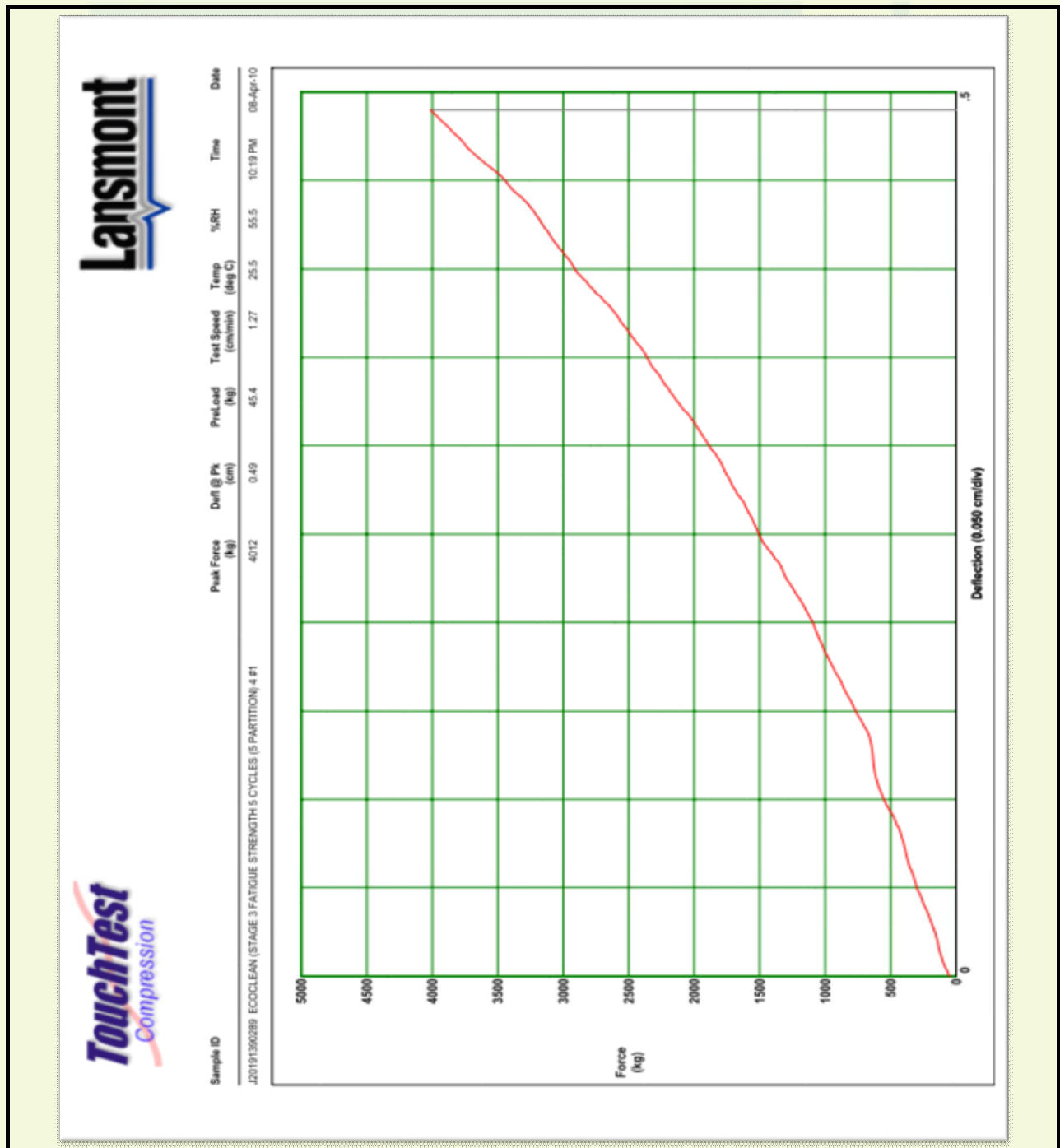


Figure 23: Fatigue Strength Test graph by uniformly distributed 4<sup>th</sup> Cycles  
(5 partitions)





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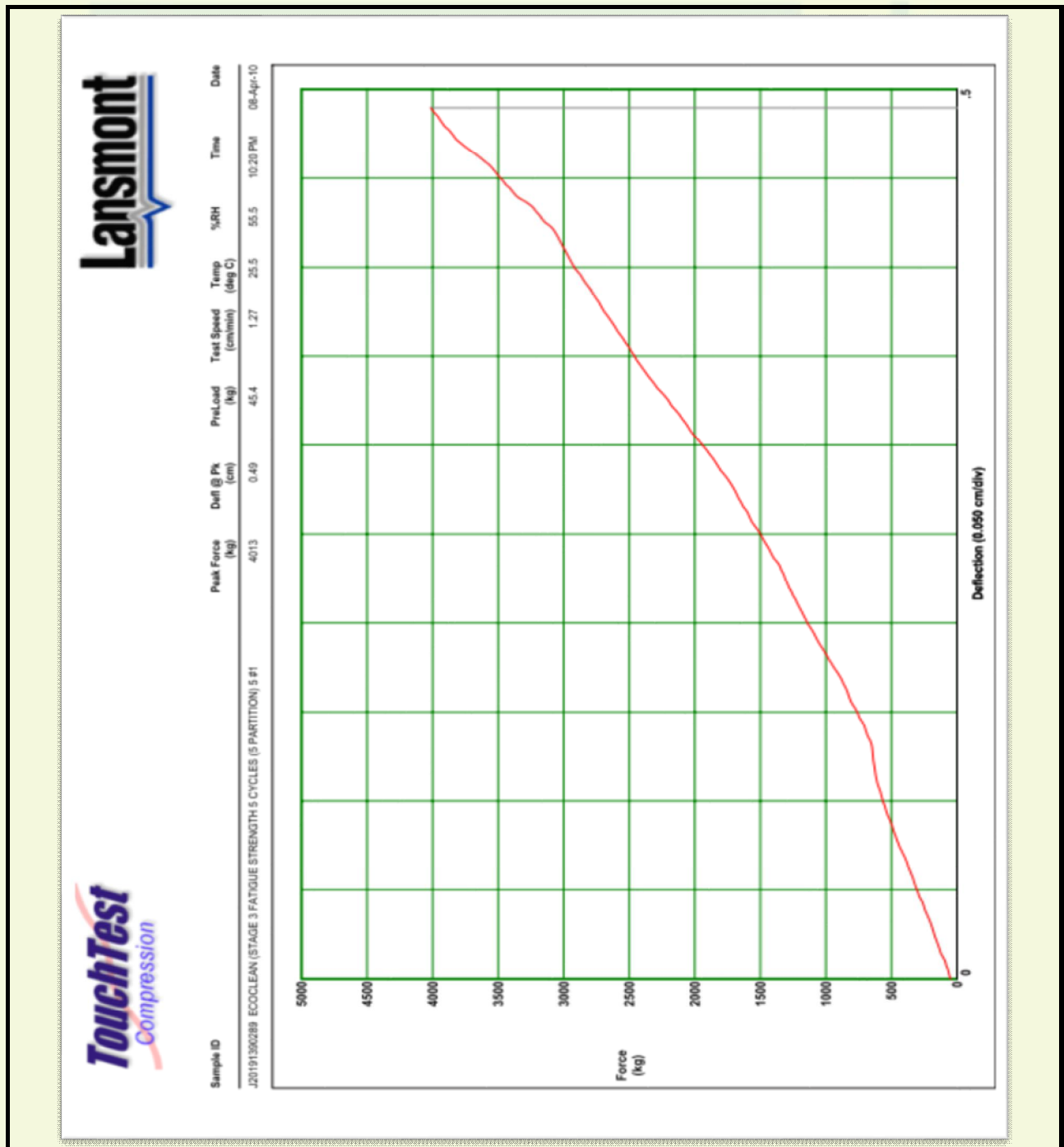


Figure 24: Fatigue Strength Test at 3.0g by uniformly distributed 5<sup>th</sup> Cycles (5 partitions)



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3. If the Test Report is to be furnished to any third party or to the public, each such Test Report shall be furnished in full, legible and in its entirety.
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6. If such approval is obtained from the Managing Director of SIRIM QAS International, the Applicant may only include the phrase, "A sample of this product has been tested by SIRIM QAS International ... (Test Report No) ... (dated) .... (for what test) ... (to which standard)" or such similar words which stress that only the Sample was actually tested. This phrase shall only be used for the purpose of product advertisement or product promotion (eg; brochures). For avoidance of doubt, the statement shall not be used on the sample and packaging of the sample.
7. In the event there is an investigation from a Government Regulatory Agency concerning the Applicant's Test Report, SIRIM QAS International may disclose the information pertaining to the Test Report for purposes of such investigation.
8. Further or in the alternative, it is strictly forbidden unless with prior written approval from the Managing Director of SIRIM QAS International, to represent in any manner whatsoever that SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries has endorsed, approved or validated the Product of the Applicant in any manner whatsoever.
9. In the event the Applicant is found in breach of this provision, SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries without prejudice to any other rights and remedies may take whatever action necessary including but not limited to:
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  - b) Obtaining an injunction from Court (cost on a solicitor-client basis to be borne by the Applicant);
  - c) Refusing to accept any further Product for Testing Services from the Applicant or whosoever related to the Applicant, whether subsidiary or otherwise;
  - d) Instructing the Applicant to withdraw and recall the advertisement, statement or document in question and advertise a clarification and apology to SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries twice in a national publication of SIRIM QAS International's choice at the Applicant's sole cost; and
  - e) Informing or lodging a report pertaining the Applicant's Test Report with the relevant authorities.
10. Certified true copies of the Test Report may be issued upon request by the Applicant upon payment of the relevant fee.
11. Corrections to test report shall only be allowed within 6 months from issuance date of the test report and shall be limited to maximum 3 times, after either case whichever occurs earlier, a new test report shall be issued and replace the previous one (having error(s) or lack of information). Issuance of Supplementary Report to the original Test Report shall be for the followings;
  - a) Misprints and typo errors
  - b) Missing technical information
  - c) Test data not reported
  - d) Mistake in reporting of test data