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ECCN 9E991

FLIGHT TEST PLAN

Title	STALL TESTING WITH EFS AND/OR STS OFF
FTP Identifier	C1.33.AAK
Airplane Model	737
Project Number	PS18-0837
Delegation	
FTP Approval	Retained
Revision Approval	Retained

Model No: 737

PROPRIETARY - EXPORT CONTROLLED

D

STALL TESTING WITH EFS AND/OR STS OFF

SIGNATURE BLOCK

Author	(b) (6)	11/20/2019
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Chief Pilot	11/19/2019	
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Supervisor	11/20/2019	
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8100-9 Document Upload	11/20/2019	
	Date (UTC)	
Government Agency	GRP, CFTP	11/20/2019
	/s/ Ripple, Shaun (for)	Date (UTC)
	GRP, FAA	11/20/2019
		Date (UTC)

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REVISION SUMMARY

Rev	Date	Description of Change(s)
A	09/17/2019	(b) (4)
B	10/04/2019	(b) (4)
C	11/05/2019	(b) (4)
D	11/18/2019	(b) (4)

REFERENCES

a	Work Authorization (WA) YA3040-005, "Enhanced Digital Flight Control System (EDFCS) P12.1.1 or latest S/W Engineering Flight Test"
b	Certification Plan (CP) 23168, "737-8 / 737-9 Flight Control Computer Software Replacement (Version P12.1.2)", Deliverable #43.
c	Certification Specifications and Acceptable Means of Compliance for Large Aeroplanes CS-25, Book 2, AMC Subpart F, "Figure 2: Relationship Between Probability and Severity of Failure Condition".

INTRODUCTION

The objective of this test is to demonstrate aircraft characteristics with and without the stall identification system. The stall identification system is comprised of both the Speed Trim System (STS) and Elevator Feel Shift (EFS). Stalls with Elevator Feel Shift (EFS) and/or the Speed Trim System (STS) inactive as well as additional stall identification system inactive during operational conditions will be performed to demonstrate capability for continued safe flight and landing (CSF&L) requiring no exceptional piloting skill or strength.

CROSS-FUNCTIONAL REVIEW

FTEA Structures cross-functional approval for TOL004 alleviation.

REGULATIONS AND METHOD OF COMPLIANCE

The method of compliance is contained in the "Procedure" and "Success Criteria" of each condition block.

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This testing is showing compliance for both the 737-8 and 737-9 aircraft.

For 737-8:

All CFR regulations are 14 CFR Part 25 as amended by Amendments 25-0 through Amendment 25-137, plus amendment 25-141, in accordance with the type certification data sheet (TCDS), A16WE rev 64, dated October 10, 2018.

All CS regulations are European Aviation Safety Administration Certification Specification 25 Amendment 11, in accordance with the type certification data sheet (TCDS), IM.A.120 Issue 18, dated May 24, 2019

For 737-9:

All CFR regulations are 14 CFR Part 25 as amended by Amendments 25-0 through Amendment 25-137, plus amendment 25-141, in accordance with the type certification data sheet (TCDS), A16WE rev 64, dated October 10, 2018.

All CS regulations are European Aviation Safety Administration Certification Specification 25 Amendment 12, in accordance with the type certification data sheet (TCDS), IM.A.120 Issue 18, dated May 24, 2019

Note: The regulations to which compliance is being shown in this test plan are not changed between EASA CS Specification 25 Amendment 11 and 12.

Item	Description	Condition(s)
25.671(c)(1) [25-23]	(b) (4)	

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Item	Description	Condition(s)
CS 25.671(c)(1)	(b) (4)	
25.672(b) [25-23]		
25.672(c) [25-23]		

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Item	Description	Condition(s)
	(b) (4)	
25.1309(b) [25-123]		
CS 25.1309(b)		
Issue Paper F-10		

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Item	Description	Condition(s)
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Config	Description	Condition(s)
A	(b) (4)	
B		

TEST EQUIPMENT

None required.

INSTRUMENTATION

The data system and instrumentation calibration will be maintained per Boeing process as defined in PRO-1087 and BPI-247.

Item	Description	Condition(s)
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(b) (4)		
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STALL TESTING WITH EFS AND/OR STS OFF

DATA REQUIRED

Item	Description	Condition(s)
(b) (4)		

TEST REQUIREMENTS

(b) (4)		
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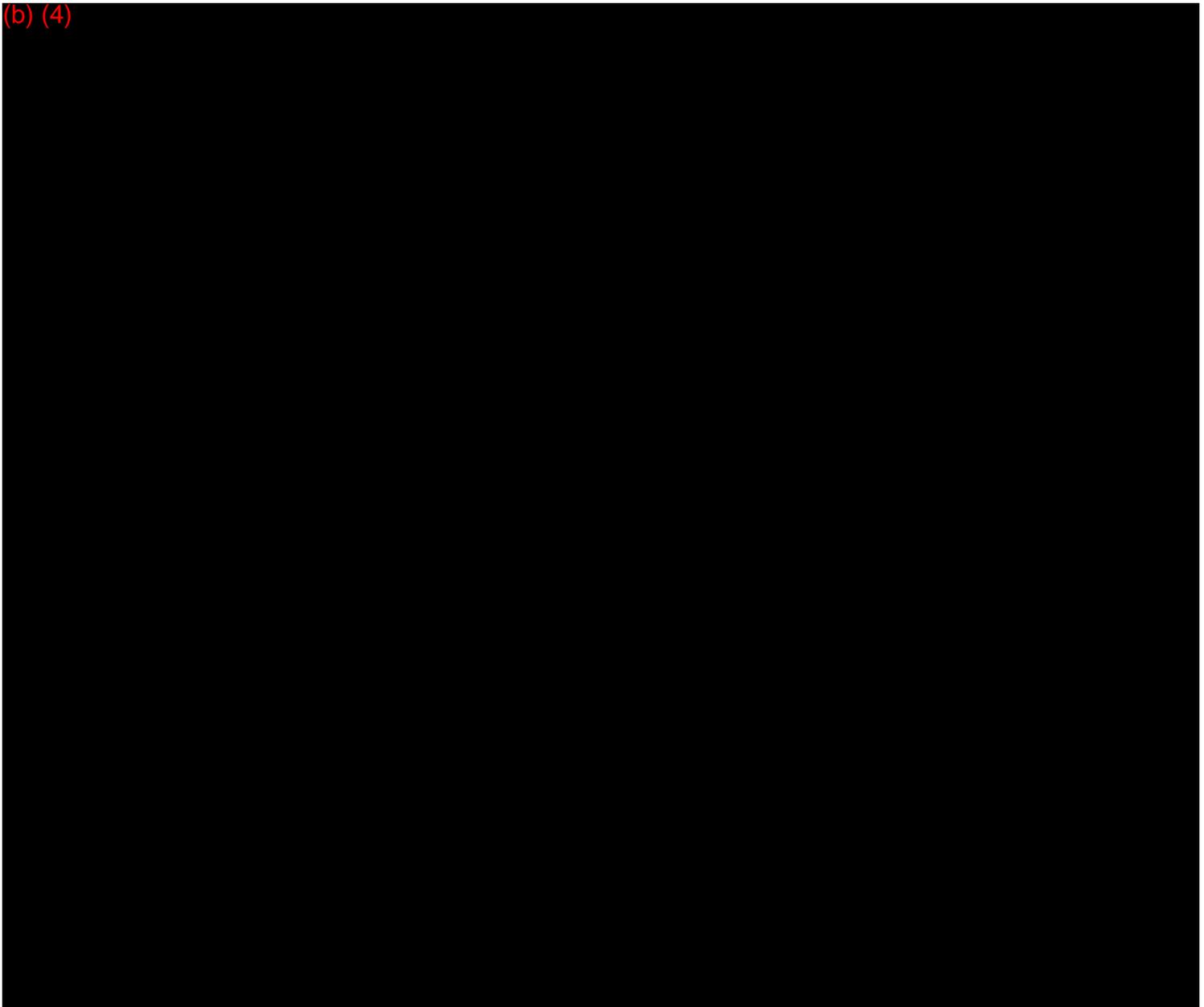
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TEST LIMITATIONS

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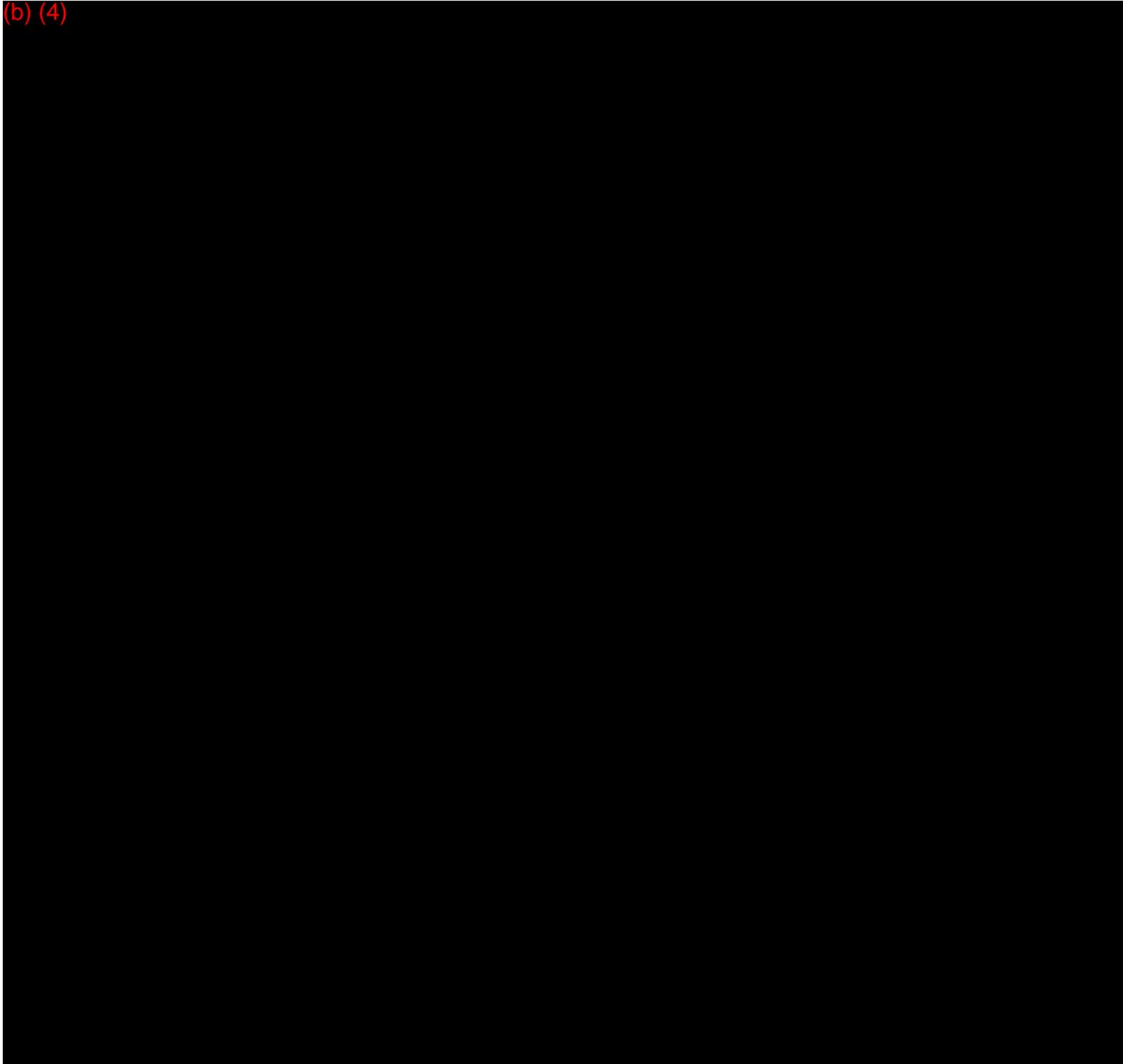
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RISK MANAGEMENT

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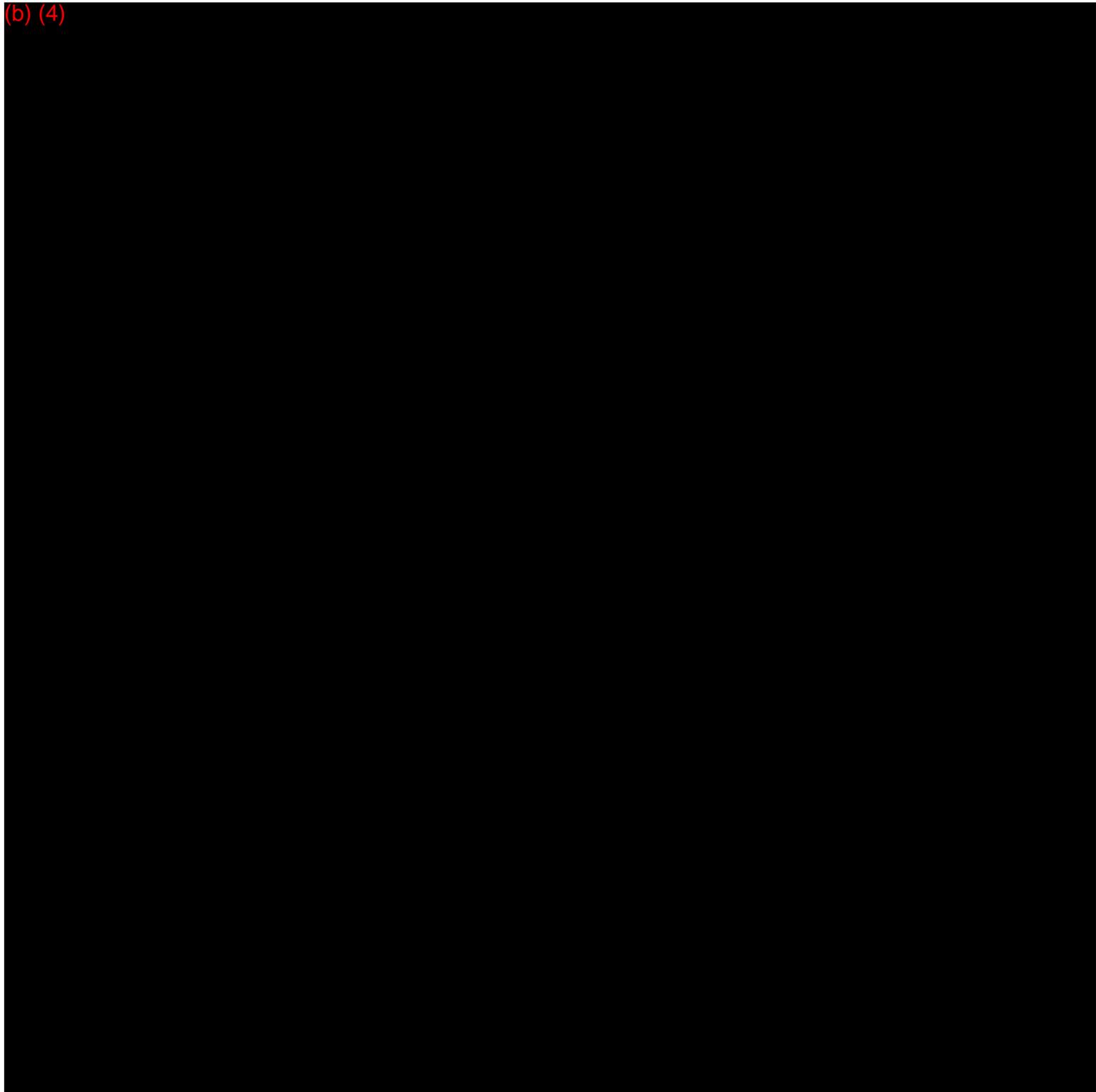
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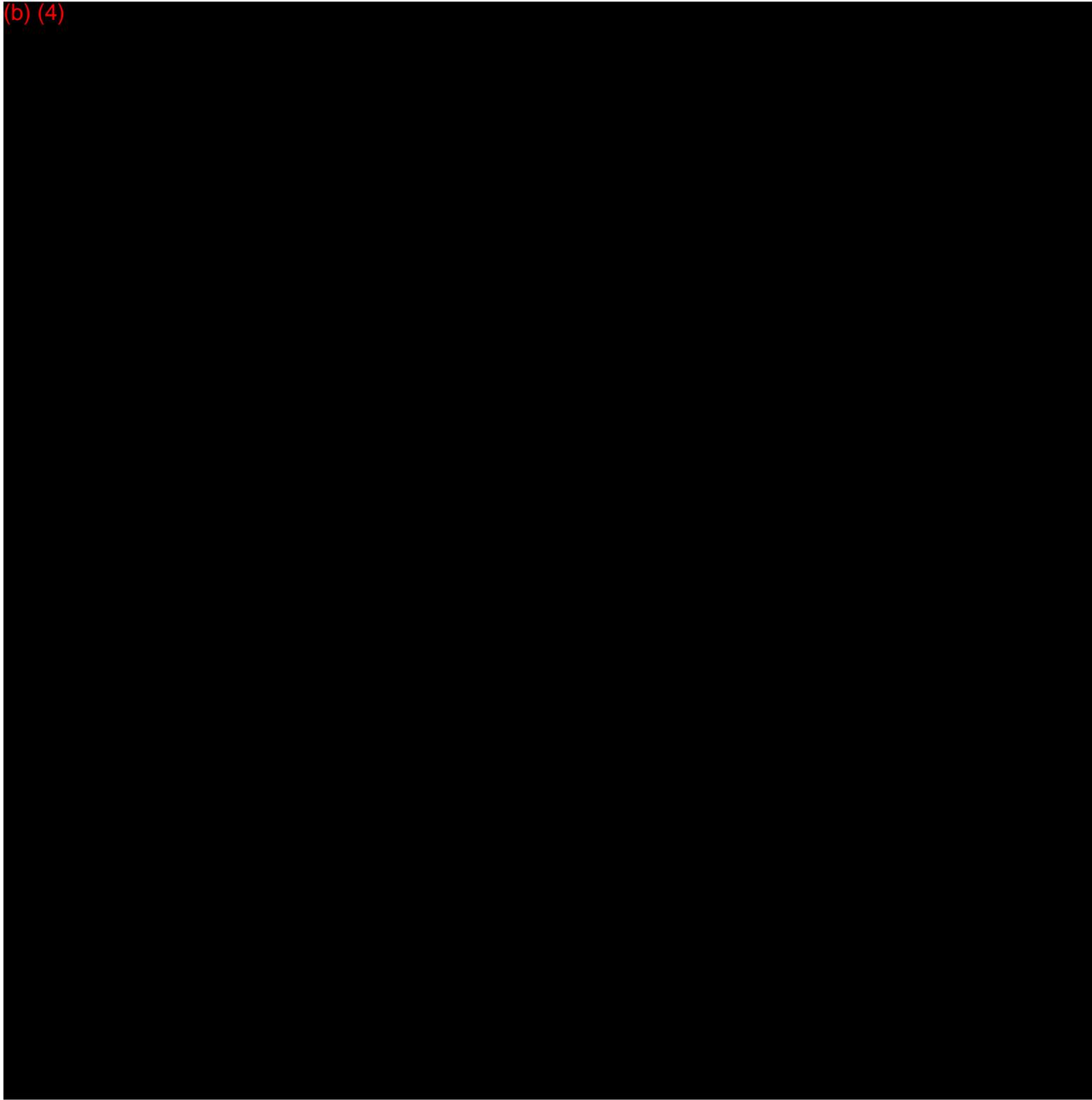
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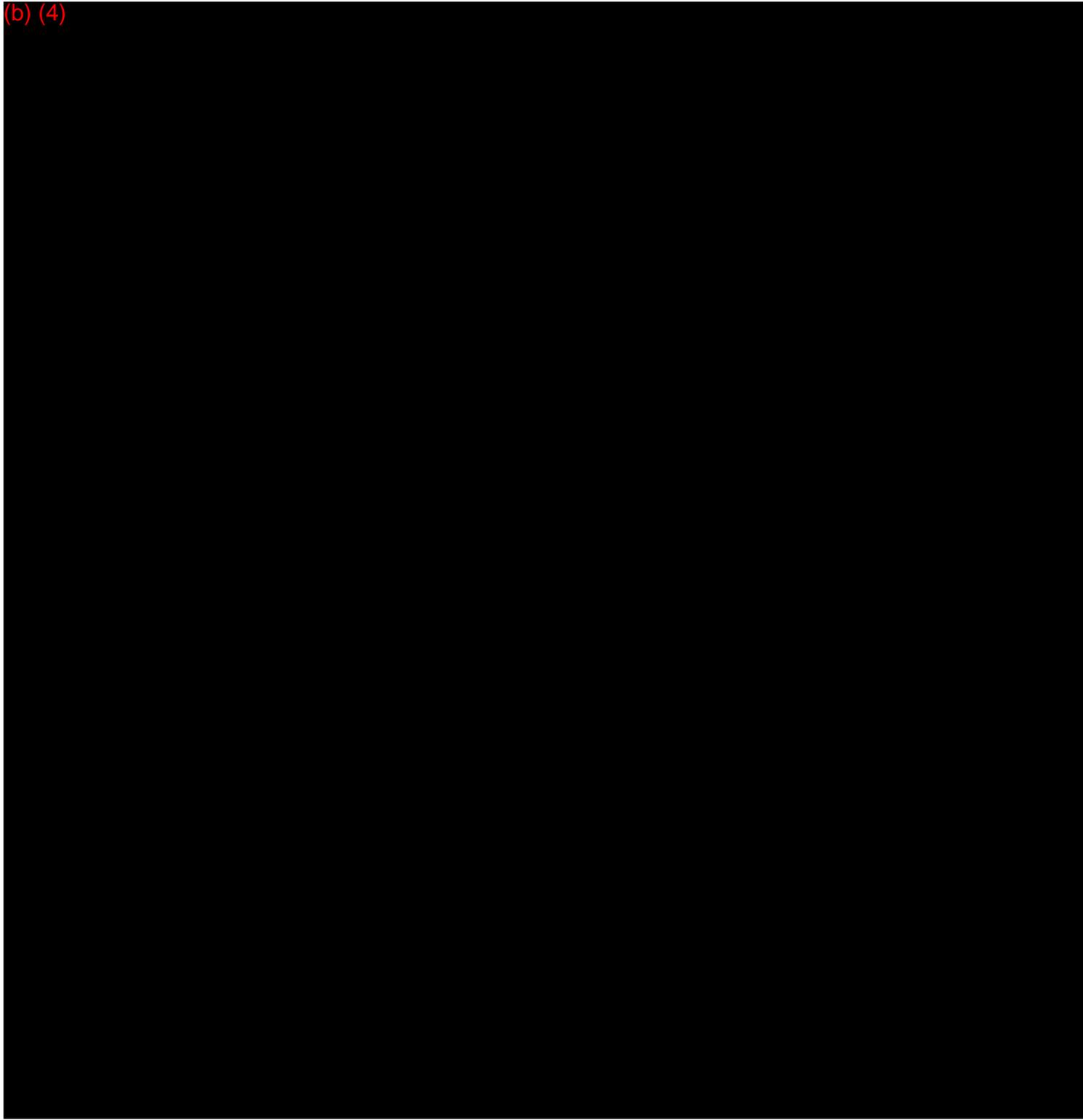
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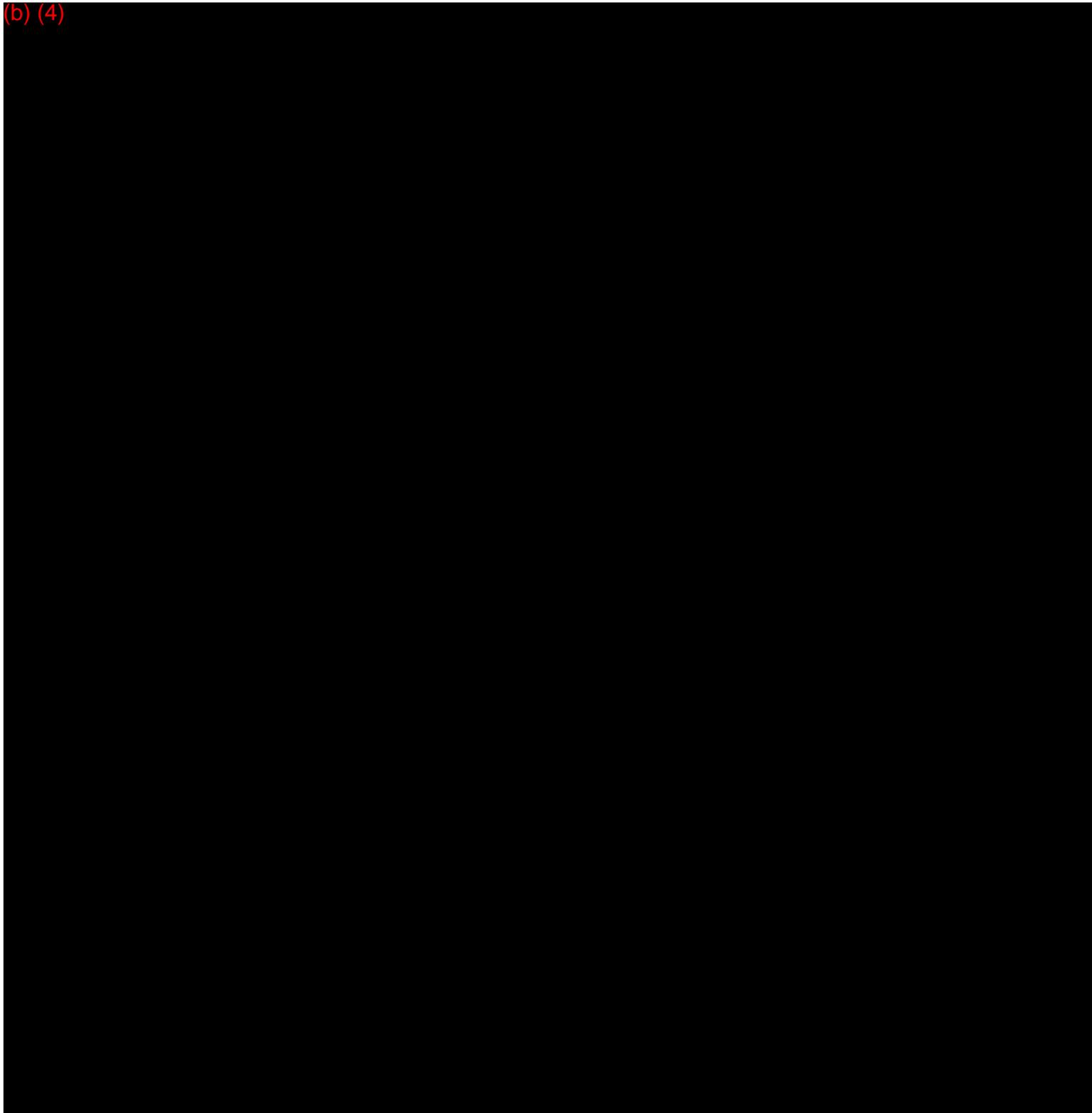
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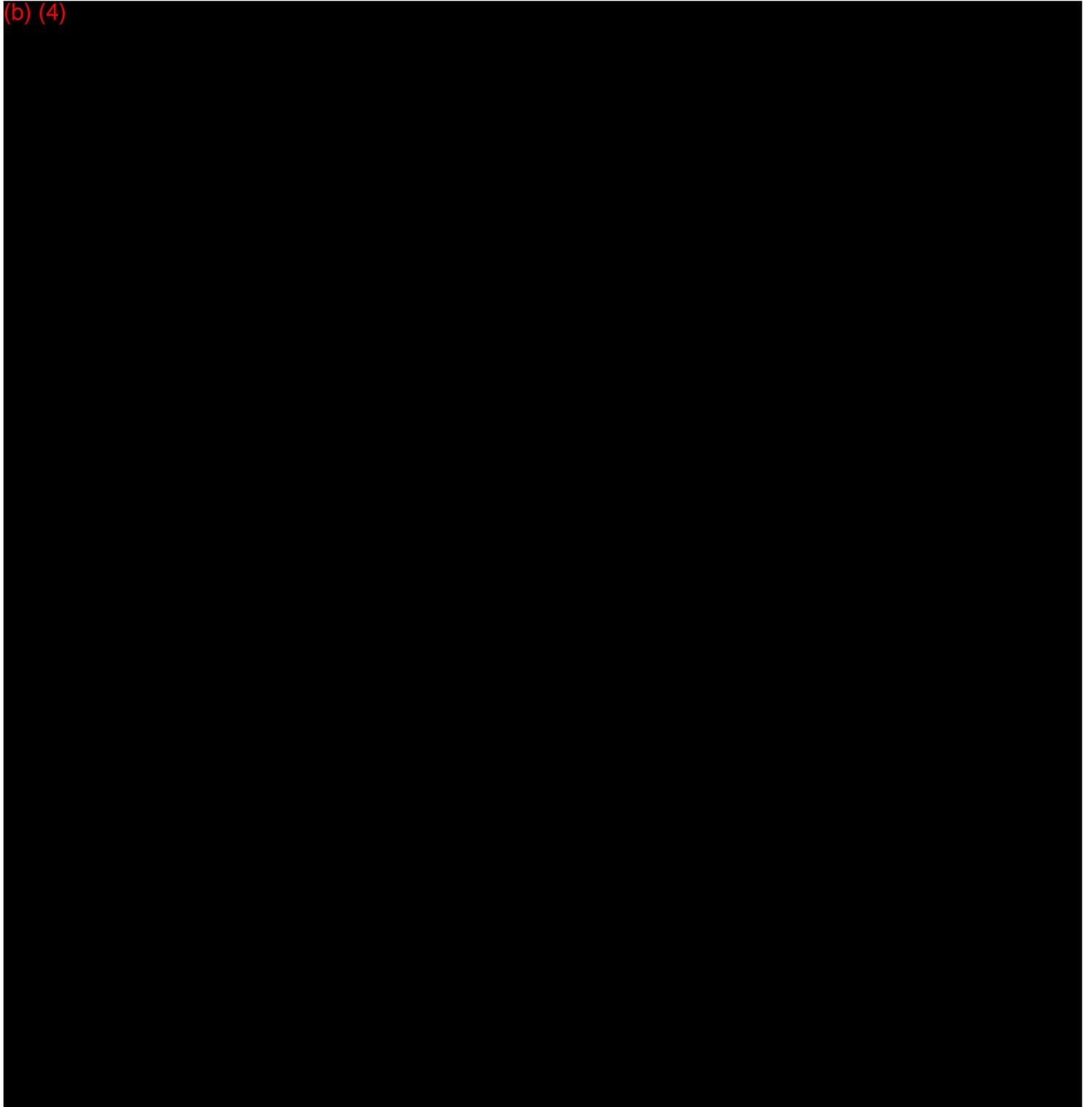
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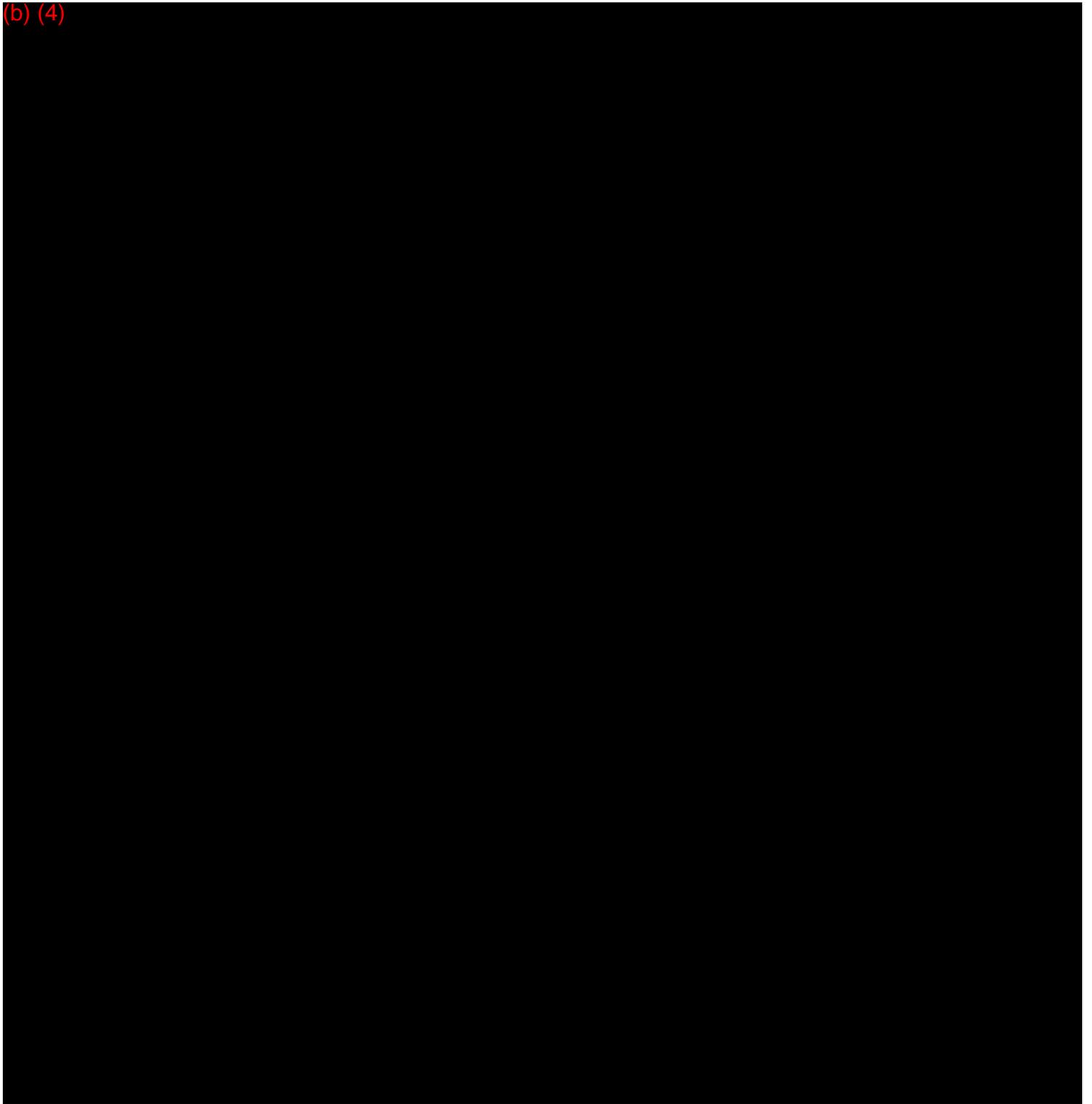
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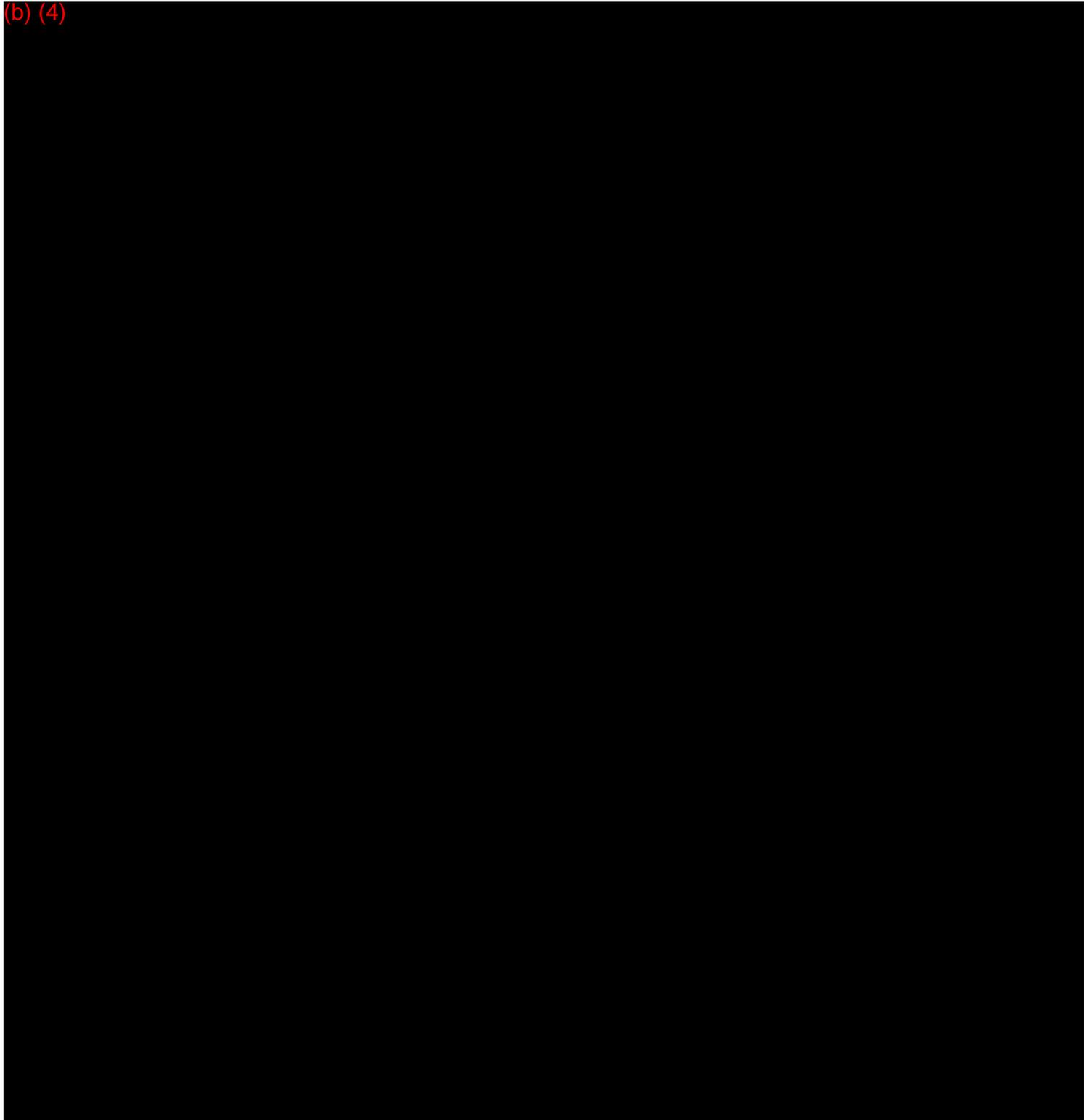
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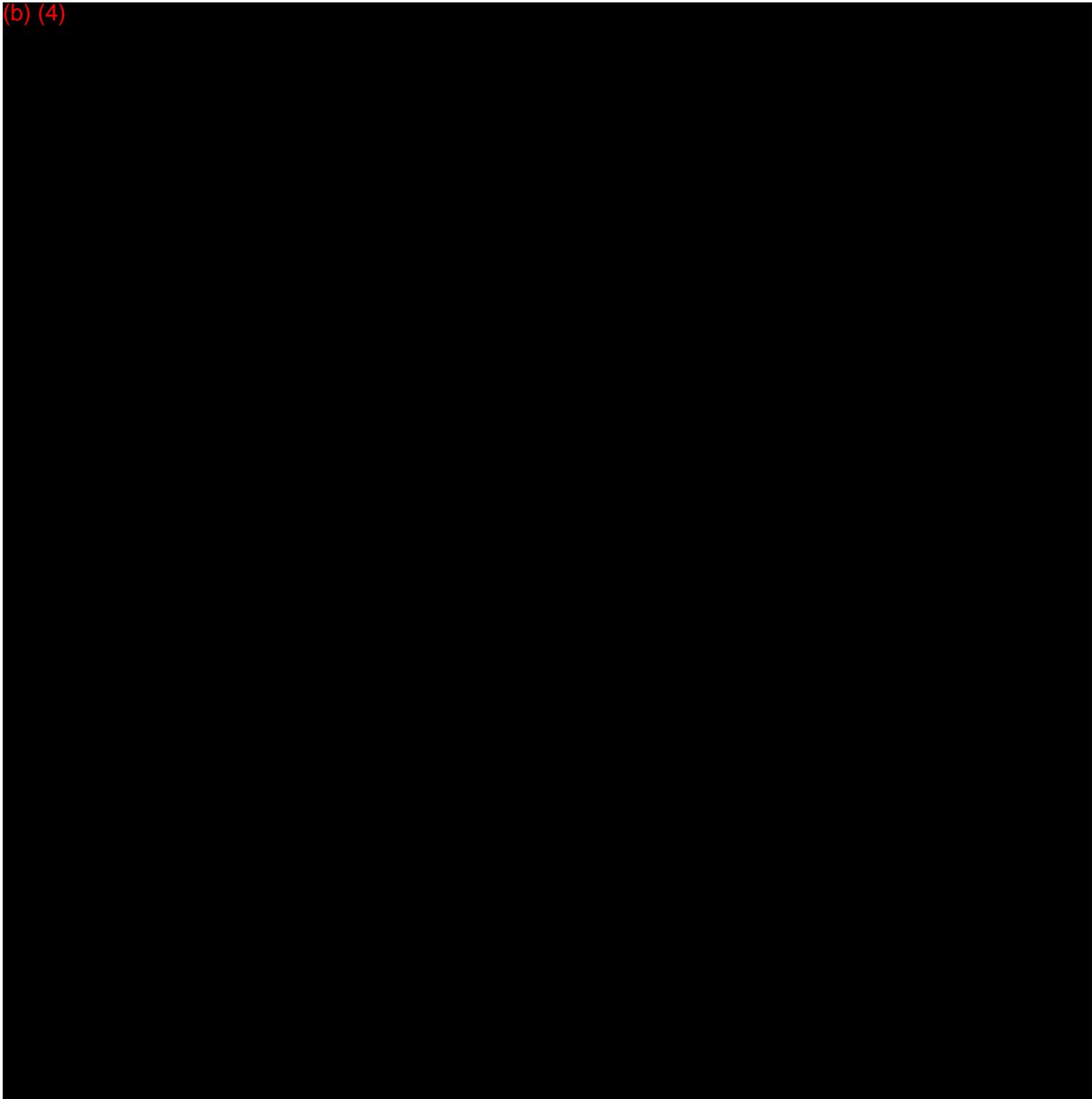
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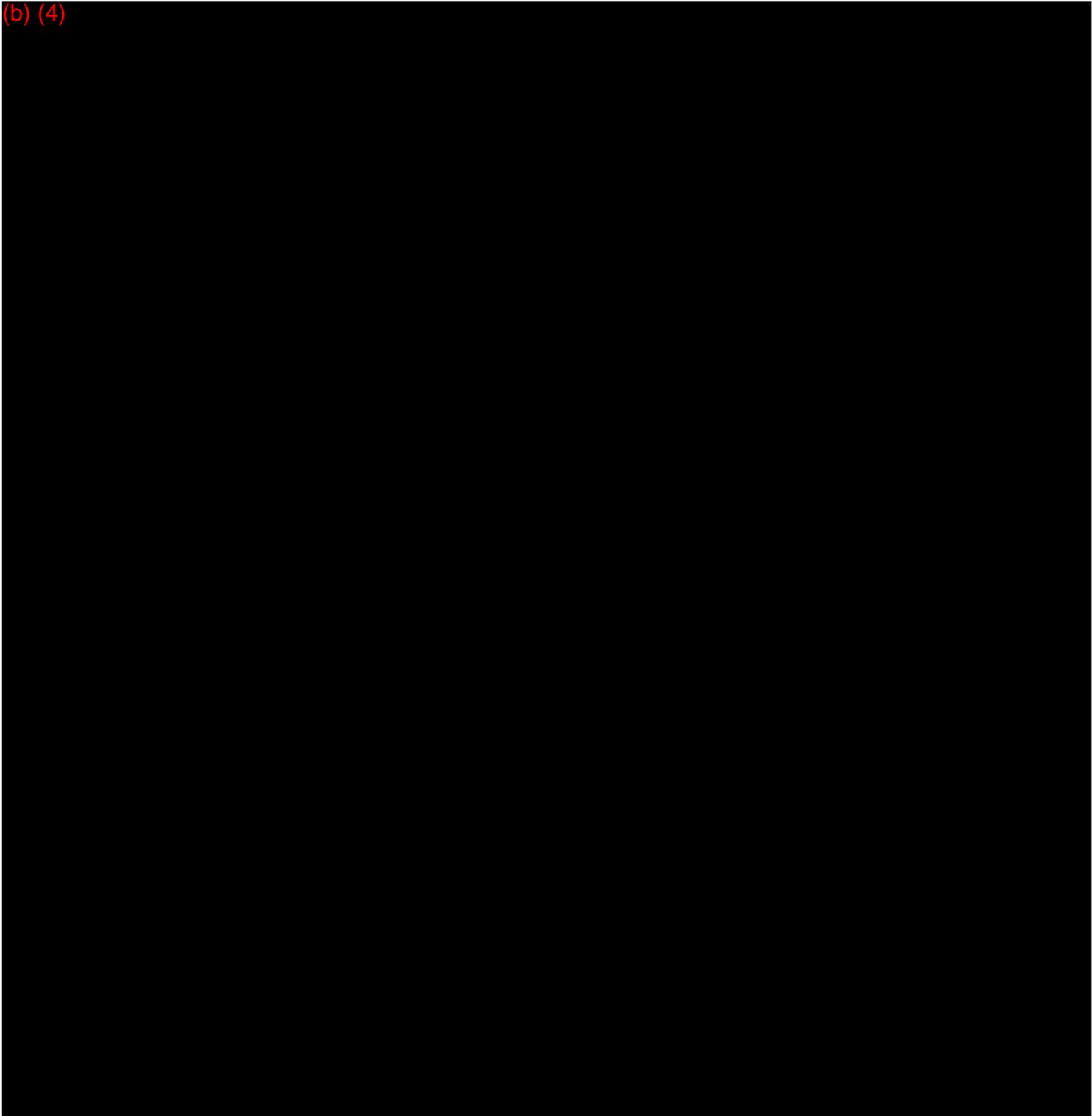
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APPENDIX

EASA AMC 25.1309: Relationship Between Probability and Severity of Failure Condition

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