GLI®

World Headquarters

600 Airport Road
Lakewood, NJ 08701

Phone (732) 942-3999
Fax (732) 942-0043
www.gaminglabs.com

29 December 2025

Prizes and Betting Secretariat of the Ministry of Finance
Esplanade of the Ministries,
Block P, Civic-Administrative Zone
Brazil-DF, 70048901

RE: Random Number Generator Report

File Number: RN-711-MNO-25-01

Dear Sir/Madam,

Enclosed, please find a detailed explanation of the Random Number Generator (RNG) testing results of the 'Mondogaming SRL RNG', evaluated against the applicable RNG-specific requirements listed herein.

Please visit Gaminglabs.com to view the applicable Terms and Conditions and GLI Product Certification Scheme.

Registration Number of Accreditation applicable to this Report:	A2LA 2428.05

If you should have any questions regarding this Random Number Generator Report, please feel free to contact our office.

Sincerely,
GAMING LABORATORIES INTERNATIONAL, LLC

Christine M. Gallo
Senior Vice President, Quality and Technical Compliance

c: Mr. Matteo Dimatteo, Mondogaming SRL

SZ

Worldwide Locations

World Headquarters
Lakewood, New Jersey

International Offices
GLI Africa
GLI Asia
GLI Australia Pty Ltd
GLI Austria GmbH
GLI Europe BV
GLI UK
GLI Italy
GLI South America

North American Offices
Colorado
Nevada
British Columbia

RANDOMNESS REPORT FOR THE MONDOGAMING SRL RNG

The intent of this report is to indicate that **Gaming Laboratories International**, **LLC** (GLI) has completed its evaluation of the Mondogaming SRL random number generator (RNG), v0.0.5, provided by Mondogaming SRL.

SECTION I - SCOPE OF TESTING

GLI was provided the required materials to conduct a randomness evaluation on the Mondogaming SRL RNG. The scope of this evaluation was limited to software verification, source code review, and statistical testing. The RNG was tested for its ability to randomly produce outcomes for the parameters in Section IV – Statistical Testing.

The Mondogaming SRL RNG was evaluated against the RNG-specific requirements of the following technical standard:

- LAW Brazil (Federal) Law No. 13,765, of December 17, 2018
- O722 Brazil (Federal) SPA/MF Ordinance No. 722, of May 2, 2024
- O1207 Brazil (Federal) SPA/MF Ordinance No. 1,207, of July 29, 2024

SECTION II - SOFTWARE VERIFICATION

Verify+ by Kobetron™ signatures for the Mondogaming SRL RNG are as follows:

File	Version	Type	Signature
app	v0.0.5	Kobe4	U86F
		MD5	E62AF9B0151AB8E38595814825B66C4D
		SHA-1	7B3F69699455E900A58AC9221EDEBAE90B1FA3E2

Table 1. Digital Signatures

SECTION III - SOURCE CODE REVIEW

GLI received the appropriate documentation and full source code which pertains to the generation of random numbers. GLI reviewed the source code provided by tracing the path of the RNG application from the initiation of the draw to the selected output of random numbers. GLI inspected the source code, where practicable, in an attempt to find any undisclosed switches or parameters having a possible influence on randomness and fair play. GLI assessed the ability of the RNG to produce all numbers within the desired range.

SECTION IV - STATISTICAL TESTING

The RNG parameters tested are listed in Table 2. GLI performed a data format check on each data set listed in order to confirm that these parameters were correctly represented in the data analyzed.

GLI conducted a statistical analysis of sufficient scope to test the RNG for selecting 1 winner from a pool size from 30 and up to and including 204 as described in Table 2. To provide this level of assessment, GLI selected different test cases for statistical testing. The selection of test cases took into account broad coverage of the RNG parameters listed.

Crash data has been tested by collecting floating point numbers between 0 and 1, then the first 3 digits after the decimal point were taken to perform testing on numbers between 0 and 999 included.

Data Set	Range	Positions
Slot	from 30 and up to and including 204	1
Crash	0-1	1

Table 2. RNG Parameters

In addition to final outcome data, GLI tested raw outcomes consisting of binary output from the main RNG algorithm prior to the application of any scaling algorithms. For a summary of the statistical tests applied to each data set, see *Appendix A*. For a description of the overall test methodology and a description of each test used, see *Appendix B*.

Overall, the RNG passed the battery of tests for each configuration at the 95% confidence level.

SECTION V - SUMMARY

Overall Evaluation of the Random Number Generator

GLI's conclusion based upon the tests applied to the Mondogaming SRL RNG data is that this RNG has exhibited random behavior and is suitable for the applications as described herein. If a game utilizes different RNG parameters than the ones listed in this report, the RNG should be resubmitted to test that set of parameters.

APPENDIX A: Statistical Test Summary

					Test Names	
Data Set	**Range**	**Positions**	**Replacement**	**Draws**	**Total Distribution**	**DieHard**
Slot	from 30 and up to and including 204	1	N/A	3,400,000	X	
Crash	0-1	1	N/A	3,700,000	X	
Binary	Not Applicable					X

Table A 1. Tests Applied

APPENDIX B: Test Descriptions

B.1 **Definitions.** The following terms apply to the below test descriptions. Randomness Device or Random Number Generator (RNG) output may be collected multiple numbers at a time. Each set of numbers is called a draw. Each individual number has a particular order within the *draw*. This is referred to as the number *position*.

B.2 **Distribution Comparisons.** Many of the tests compare an observed numerical distribution with an expected distribution. Unless otherwise specified, this is done by means of a statistical chi-square goodness-of-fit test. The value chi-square is computed in the standard way. If *k* is a possible value, o_k is the observed count of that value, and e_k is the expected count:

$$\chi^2 = \sum_k \frac{(o_k - e_k)^2}{e_k}$$

In the case where expected counts are too small for accurate use of the above formula, values are 'binned' together to ensure an appropriate minimum expected count. The resultant value for chi-square is compared against the distribution for the appropriate number of degrees of freedom. Unusually high (distribution mismatch) or unusually low (insufficient randomness) chi-square values can be causes for data failure.

B.3 **Meta-testing**. Evaluation of groups of *p*-values may include a meta-test for extremity of high or low *p*-values, a meta-test for frequency of high or low *p*-values, and a meta-test for uniformity of *p*-values, as appropriate.

B.4 **Confidence Level**. The statistical tests conducted by GLI are done at a particular *confidence level*. Common confidence levels used include 95%, 98%, and 99%, depending on jurisdictional requirements, and intended use of the RNG. High confidence level testing has low risk of mistakenly failing a good RNG, but higher risk of passing a bad RNG. Lower confidence level testing has increased power of detecting bad RNGs, while also increasing the risk of false failures of good RNGs. Specifically, the confidence level represents the probability that an ideal source of randomness would pass the testing. If an RNG passes statistical tests at a given confidence level, passage at all *higher* confidence levels is implied.

B.5 **Tests**. Some tests are only applicable to certain types of data. Some tests may be applied only to a portion of the data. Some tests may require that the data be parsed, binned, or otherwise transformed, as necessitated by data format.

DieHard:

The DieHard Battery of Tests is a standard assessment of the randomness in raw outcomes generated from an RNG. The collection, designed by George Marsaglia, tests for a variety of patterns in the individual binary bits of RNG output. GLI uses a custom implementation to conduct DieHard testing.

Total Distribution:

The Total Distribution Test is a simple tally of all observed values throughout the data. This is compared with the expected distribution. Typically, the expected distribution is a uniform distribution. In the case of unequal weighting of values, an appropriate discrete distribution is used.