



## **Random Number Generator Certificate**

**Operator:** Cyberluck N.V.

**URL:** [www.goldengoosegaming.com](http://www.goldengoosegaming.com)

This is to certify that iTech Labs has evaluated the Random Number Generator (RNG) used for the games in the CTXM Gaming System and found that the RNG complies with the relevant standards\*.

The CTXM games use a widely recognized algorithm to generate the random numbers. The numbers generated by this RNG have passed Marsaglia's "diehard" tests for statistical randomness.

iTech Labs has evaluated the shuffling of the cards for all card games. Chi-squared tests were applied to over 8 million shuffled decks in 1 deck, 4 decks, 6 decks and 8 decks formats. The tests were applied to suits 1-4, ranks 1-13 and cards 1-52. iTech Labs has found that the card sequences are unpredictable and non-repeatable.

iTech labs has applied Chi-squared tests to scaled numbers for all non-cards games (roulette games, slot games, dice games, scratch games and miscellaneous ranges for the XG games). These tests have indicated statistical randomness.

Chi-squared tests were conducted for the following games:

<b>Game type</b>	<b>Game name</b>
Baccarat	Baccarat
Blackjack	Blackjack
Blackjack	Blackjack Surrender
Card game	Card Wars
Classic Slots	Gold in Bars
Classic Slots	Hot 7's
Classic slots	Mexican Slots
Classic Slots	Pirate Slots
Craps	Craps
Keno	Keno
Poker	Caribbean Poker
Poker	Casino Hold 'Em
Poker	Let Them Ride
Poker	Pai Gow Poker
Poker	Poker Three
Roulette	American Roulette
Roulette	European Roulette
Roulette	Roulette PRO
Sic Bo	Sic Bo
Scratch Game	Bingo Scratch
Video Poker	Coliseum Poker
Video Poker	Deuces Wild
Video Poker	Face the Ace
Video Poker	Five Aces
Video Poker	Jacks or Better
Video Poker	Joker Wild
Video Poker	Shockwave Poker

Video Poker	4-Line Coliseum Poker
Video Poker	4-Line Deuces Wild
Video Poker	4-Line Face the Ace
Video Poker	4-Line Jacks or Better
Video Poker	4-Line Joker Wild
Video Poker	10-Line Coliseum Poker
Video Poker	10-Line Deuces Wild
Video Poker	10-Line Face the Ace
Video Poker	10-Line Jacks or Better
Video Poker	10-Line Joker Wild
Video Poker	25-Line Coliseum Poker
Video Poker	25-Line Deuces Wild
Video Poker	25-Line Face the Ace
Video Poker	25-Line Jacks or Better
Video Poker	25-Line Joker Wild
Video Poker	50-Line Coliseum Poker
Video Poker	50-Line Deuces Wild
Video Poker	50-Line Face the Ace
Video Poker	50-Line Jacks or Better
Video Poker	50-Line Joker Wild
Video slots	Archipelago
Video slots	Aztec Slots
Video slots	China MegaWild
Video slots	Cleopatra Treasure
Video slots	Freaky Fruits
Video slots	Mystic Slots
Video slots	Olympic Slots
Video slots	Party Night
Video slots	Spin the World
Video slots	Totem Quest
Video slots	Atlantis Dive
Video slots	Freaky Wild West
Video slots	Freaky Gym
Video slots	Summer Dream
XG Games	Black and White
XG Games	Derby
XG Games	Greyhounds Park
XG Games	Hockey Shot
XG Games	Instant Lotto
XG Games	Penalty Shootout
XG Games	Rollup
XG Games	Soccer Shot
XG Games	Wheel of Fortune
XG Games	Bonus Cards
XG Games	Jackpot7
Mini Games / Classic Slots	Pirate Slots
Mini Games / Classic Slots	Mexican Slots
Mini Games / Blackjack	Blackjack
Mini Games / Poker	Casino Hold'em
Mini Games / Roulette	European Roulette
Mini Games / Scratch Game	Bingo Scratch
Mini Games / Video Poker	Deuces Wild
Mini Games / Video Poker	Jacks or Better

The tests conducted for the above games were limited to correct use of the RNG.

The certified code for the RNG has been fingerprinted.

Click here to view the [Original](#) iTech Labs Certificate.

**Signed:**



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**Ian Manning**  
**Principal Consultant**  
**iTech Labs Australia**

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\* The RNG was tested according to Alderney Gambling Control Commission (AGCC) and Isle of Man requirements.

Disclaimer.

While it is not possible to test all possible scenarios in a laboratory environment, iTech Labs has conducted a level of testing appropriate for a component test of this type.

