

# PROMOTIONAL PACKET



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December 18, 2023

Dear Sir or Madam,

We respectfully submit this letter of intent to your casino on behalf of Romito Gaming, LLC requesting consideration for a Field Trial of Low Four<sup>®</sup>. Your support would provide the foundation for seeking final regulatory approval from the Nevada Gaming Commission and provide the opportunity for you to showcase a new and exciting game.

Low Four<sup>®</sup> was conceived by Bob Schotzinger of Romito Gaming after visiting Atlantic City. It seemed that most table games were blackjack or poker based, and many were difficult to learn or intimidating for players. Bob set out to develop a game that was simple, fun and did not require detailed knowledge of standard casino games.

We understand hosting a field trial does not come without challenges. We would appreciate the opportunity to demonstrate how Low Four<sup>®</sup> will benefit your casino's bottom line. Through this packet and live demonstration, we hope to prove Low Four<sup>®</sup> will be a fresh and profitable addition to your table game lineup. The game has been validated by GLI<sup>®</sup> and is easy to implement as it uses standard equipment. We expect the easy-to-learn rules and strategy will appeal to a wide range of players. Our partnership will lead the table game market in setting new standards in game innovation.

Thank you for your consideration. We look forward to partnering with your casino. If you would like to schedule a live demo or require additional information regarding Low Four<sup>®</sup>, please feel free to contact Bob Schotzinger at Romito Gaming, LLC at (919) 271-8112 or bob@romitogaming.com. We look forward to hearing from you.

Sincerely, Heather Ferris Vegas Aces Services, LLC

# Felt Layout



# **Photo Gallery**





## The Story Behind the Game



Romito Gaming was formed by the father and son team of Bob, Mike, and Tom Schotzinger to develop and market their novel table games. Bob is a biotechnology CEO and serial entrepreneur, Mike is a Venture Capitalist and Tom is a CPA, but they all share a passion for gaming and mathematics. Their varied background and experiences allow them to bring a fresh and unique perspective to the field of gaming.

Low Four<sup>®</sup> was conceived by Bob after visiting Atlantic City. It seemed that most table games were blackjack or poker based, and many were difficult to learn or intimidating for

players. Bob set out to develop a game that was simple, fun and did not require detailed knowledge of standard casino games. Working from a card game that he had developed many years ago where the goal was to build a hand with the fewest points possible, Bob adapted the game rules and math for modern casino gaming.



Bob brought the original game concept to Mike and Tom, who added further refinements and improvements. Finally, Bob enlisted the assistance of several gaming experts including mathematician Mason McElroy and attorney Rich Newman to help validate the game. The upshot is a game that is unique, fun, easy to learn and accessible for all players. Low Four<sup>®</sup> is now ready for its first field trial!

# **Rules of Play**

## Introduction

Low Four<sup>®</sup> is a fun and easy casino card game where you aim low to win big! The game features head-to-head competition between the player and the dealer. Low Four is played with a standard 52-card single deck and standard equipment. The player objective is simple, build a hand of four cards (out of seven dealt) with the lowest possible point value and beat the dealer hand!

## How to Play the Game

The player places a mandatory Ante wager to begin the round. The player may also place up to three optional side bets: the Low Points Bonus, the High Points Bonus, and/or the Combo Progressive Jackpot. The player and dealer are each dealt seven cards face down. The player then builds a four-card hand containing the lowest possible number of points:

- Ace = 1 point
- 2-10 = Face Value
- Jack, Queen, King = 10 points
- Duplicate cards such as (3, 3), (7, 7, 7) or (Q, Q, Q, Q) are counted only once

A few examples of the total point value of a hand are as follows:

Example 1: Initial Hand (2, 2, 6, 8, J, Q, K) Four-card hand with lowest point total (2, 2, 6, 8) Total point value = 16

Example 2: Initial Hand (3, 3, 4, 5, 5, 7, 9) Four-card hand with lowest point total (3, 3, 5, 5) Total point value = 8

Once the hand is built, the player will decide whether to play or fold. If the player chooses to play, their four-card hand is placed face down in the Play box and a Play wager equal to the Ante is placed on top of their cards. The remaining three cards are discarded face down to the right of the Ante wager. If the player chooses to fold, all cards are discarded face down to the right of the Ante wager and the Ante wager is collected.

## **Optimal Player Strategy**

Statistically, the optimal player strategy is to play any hand of 14 points or lower, play *most* hands of 15 points, and fold any hand of 16 points or greater. Following this strategy, the house edge is 4.63% of the ante or 2.77% of the average expected wager.

However, given that there is no easy-to-learn rule regarding which 15-point hands to play versus fold, an alternate player strategy is to play *all* hands of 15 points or lower. Following this simple alternative strategy, the house edge increases only slightly to 4.66% of the ante or 2.78% of the average expected wager.

## How to Win

After all players have acted on their hands, the dealer will build a four-card hand with the lowest possible number of points. The dealer qualifies with a hand of 16 points or lower. If the dealer does not qualify, players receive even money on the Ante wager and the Play wager pushes. If the dealer does qualify, the dealer hand is compared to the player hand and the winning hand is the hand with the lowest number of points. If the player beats the dealer, both the Ante and Play wagers pay even money. If the dealer beats the player, both the Ante and Play wagers are collected. If the dealer and player tie, both the Ante and Play wagers push.

### **Side Bets**

There are three optional side bets in Low Four<sup>®</sup>. All side bets are paid regardless of whether or not the dealer qualifies.

The Low Points Bonus pays if the player's lowest four-card point total is less than or equal to 8. The bet pays even if the player folds. However, if following the optimal player strategy, a winning Low Points Bonus hand should never be folded.

	Low	Points	Bonus	Pay	Table
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1 or 2 Points	300 to 1
3 or 4 Points	25 to 1
5 or 6 Points	5 to 1
7 or 8 Points	2 to 1

The High Point Bonus is a hedge bet that pays if the player's lowest four-card point total is greater than or equal to 19. The bet pays whether the player folds or plays. However, if following the optimal player strategy, a winning High Points Bonus hand should never be played. When folding, the player will slide all seven cards under the High Points bet so that the dealer can verify the point total.

### High Points Bonus Pay Table

33 to 34 Points	300 to 1
28 to 32 Points 8	30 to 1
24 to 27 Points	5 to 1
19 to 23 Points	2 to 1

If available, the Combo Progressive Jackpot pays according to the sum of points in the player's lowest point total four-card hand and the dealer's lowest point total four-card hand combined. The bet pays even if the player folds. However, if following the optimal player strategy, a winning Combo Progressive Jackpot hand should never be folded. The wager is not returned if the progressive Jackpot is won.

### Combo Progressive Jackpot Pay Table

3 or 4 Points	100% of Jackpot
5 or 6 Points	10% of Jackpot
7 through 11 Points	275 for 1

# Benefits

Low Four<sup>®</sup> is a unique table game that provides a wide range of advantages to both the player and the casino.

## Player

- Easy rules and simple player strategy
- Not intimidating for new players
- No knowledge of other table games needed
- Fair odds for main game with a house edge of 2.78% of the average expected bet
- High Points Bonus lets player win with bad hand
- Enticing, high-payout potential for side bets!

## Casino

- Fresh new game concept; simple rules and player strategy will appeal to a wide range of players!
- Standard equipment used
- Two side bets that offer a favorable house edge to the casino. The Low Points Bonus has a house edge of 6.41% and the High Points Bonus has a house edge of 7.43%
- Progressive option available
- Math analysis by GLI

# Dealer's Policies & Procedures

## **Object of the Game**

The object of the game Low Four is to build a hand of four cards (out of seven dealt) with the lowest possible point value. The game features head-to-head competition between the player and dealer. Low Four uses a standard 52-card deck that is shuffled after every hand. Please refer to your employee handbook for more information on opening or closing a table, completing a house shuffle, or any other house procedures that are not covered in this guide.

## **Placing a Bet**

The player must make an initial mandatory Ante wager to play the game. At the same time, the player has a choice to make optional Low Points Bonus or High Points Bonus wagers. The side bet wagers do not need to match the Ante wager; however, they cannot be played by themselves. Scan the layout to make sure that there are no players betting under the table minimum or over the table maximum, and that the cheques are stacked correctly before delivering the first card. Once the cards have been delivered, no changes can be made to the player's bets. Players are not allowed to play their hand blind.

## How to Play

The player and dealer are each dealt seven cards face down. The cards will be dealt in a clockwise rotation, starting from the dealer's left-hand side and going right. Slightly spread the cards to verify to the cameras that all seven cards have been dealt. Once everyone has been given their hand, the dealer will place the remaining cards in the discard rack. Players may touch their cards before all the cards have left the shuffler.

The player will build a four-card hand containing the lowest possible number of points:

- Ace = 1 point
- 2-10 = Face Value
- Jack, Queen, King = 10 points
- Duplicate cards such as (3, 3), (7, 7, 7) or (Q, Q, Q, Q) are counted only once
  - For example, (2, 2, 2, 2) counts as 2 points

The player will then decide if they want to play their hand or fold. If the player folds, the cards are discarded face down to the right of the Ante and the Ante wager is collected. The dealer will leave the cards on the table until the take-and-pay procedure is concluded.

If the player decides to play the hand, their chosen four-card hand is placed face down in the Play box and the remaining three cards are discarded face down to the right of the Ante. The player will place a Play wager equal to the Ante on top of their hand. The dealer will leave the discards on the table until the take-and-pay procedure is concluded. This is to allow point total verification in the case where a player might by mistake or intentionally play a hand incorrectly in order to win the High Points Bonus bet.

If players are sharing information about their hand with other players, gently remind them they are not allowed to do this. If they continue, call your floor supervisor.

A simple strategy for players is to make the Play bet with a hand of 15 points or lower. Following this strategy, the house edge is 4.66% of the ante.

## Take-and-Pay Procedure

After all of the players have made their decision, it is the dealer's turn. The dealer will turn their cards over for all players to see. The dealer will build their lowest point total four-card hand, arranging the cards from highest to lowest. The dealer will have a space in between the cards so the floor supervisor and cameras can see them clearly. The dealer will announce their hand to the table. The dealer only qualifies with a four-card hand total four total for the table.

- If the dealer does not qualify, the player will receive even money on their Ante wager and their Play wager will push.
- If the dealer does qualify, the dealer's and player's hands are compared, and the winning hand will have the lowest number of points.
  - $\circ$   $\;$  If the player wins, the Ante and the Play wagers are both paid even money.
  - If the dealer wins, the Ante and Play wagers are collected and placed in the bank.
  - $\circ~$  If it is a tie, both the Ante and Play wagers will push and no money is exchanged.

Starting from the dealer's right-hand side and going left, the dealer will determine who has the winning hand. The dealer will flip the player's cards over and spread them far enough that they can be seen by the floor supervisor and cameras. Leave the discards face down unless the player wins the High Points side bet. At the end of the round, the dealer will verify that all seven cards are present before placing the cards in the discard rack.

## Side Bets

The Low Points Bonus is an optional side bet that pays if the player's lowest four-card point total is less than or equal to 8. During the take-and-pay procedure, the dealer will resolve the Low Points Bonus side bet after they take-or-pay the main Ante and Play wagers. The Low Points Bonus is paid whether or not the dealer qualifies.

## Low Points Bonus Pay Table

1 or 2 Points	300 to 1
3 or 4 Points	25 to 1
5 or 6 Points	5 to 1
7 or 8 Points	2 to 1

The High Points Bonus is an optional side bet that pays if the player's lowest four-card point total is greater than or equal to 19. During the take-and-pay procedure, the dealer will resolve the High Points Bonus side bet after they take-or-pay the main Ante and Play wagers. This side bet is still in play even if the player folds. If folding, the player should slide all seven cards face down under the High Points bet. During the take-and-pay procedure, the dealer will verify the lowest four-card point total by exposing all seven cards. The High Points Bonus is paid whether or not the dealer qualifies.

### High Points Bonus Pay Table

33 to 34 Points	300 to 1
28 to 32 Points	80 to 1
24 to 27 Points	5 to 1
19 to 23 Points	2 to 1

Once each player's hand has been resolved, and all wagers decided, the dealer will collect the cards and place them in the discard rack. The next hand will begin.

## **Independent Math Analysis**





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#### **Worldwide Locations**

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U.S. Regional Offices Colorado Nevada

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

### 02 October 2023

Mr. Robert Schotzinger, Executive Officer Romito Gaming, LLC 7435 S Eastern Ave Ste 105-431 Las Vegas, Nevada 89123

Scope: Mathematical Analysis of Low Four

File Number: LO-394-RJS-23-02

Evaluating Location	
GLI-2/GL3	

Nevada Registration Number: 31668-01

Dear Mr. Schotzinger,

As per Romito Gaming, LLC's request, please find **Gaming** Laboratories International, LLC's (GLI) analysis of the table game, *Low Four*, to be submitted to and reviewed by the Nevada Gaming Control Board for determination as to its suitability.

### **Game Description**

*Low Four* is a Player vs. Dealer game played with a standard 52-card deck. The objective of the game is to build a hand of four cards (out of seven dealt) with the lowest point value. In addition to the main game, there are also three optional side wagers: Low Points Bonus, High Points Bonus, and a Progressive Bonus.

At the beginning of the game, players must place an ante wager to participate in the game round. After placing the ante wager, the dealer deals seven cards face down to the player, and seven cards face down to themself. The player examines their cards and must either fold and lose their ante or stay in the game by making a play bet that is equal to their ante bet. LO-394-RJS-23-02-394 GLI-2/GL3 Page 2 of 8

If the player stays in the game, the player must choose four cards out of their seven cards and place them face down in the Play box. The remaining three cards are discarded. The point values of individual cards are as follows:

- Ace = 1 point
- 2-10 = Face value
- Jack, Queen, King = 10 points

Additionally, duplicate cards such as (3, 3) or (7, 7, 7, 7) are counted only once.

A few examples of the total point value of a hand are as follows: Example 1: Initial Hand (2, 2, 6, 8, J, Q, K) Four-card hand with lowest point total\* (2, 2, 6, 8) Total point value = 16

Example 2: Initial Hand (3, 3, 4, 5, 5, 7, 9) Four-card hand with lowest point total\*\* (3, 3, 5, 5) Total point value = 8

\* (2, 2) is counted once. \*\* (3, 3) and (5, 5) are counted once respectively.

The dealer then reveals their hand and forms a four-card hand out of the seven dealt with the lowest point total. The dealer is considered "qualified" if their total point value is 16 or lower. If the dealer does not qualify, the player wins 1 to 1 on their ante wager and the play wager will push. If the dealer does qualify, the dealer's hand is compared to the player's hand. The winning hand is the hand that contains the lowest number of points. If the player beats the dealer, the ante wager is paid 1 to 1 and the play wager is paid 1 to 1. If the dealer beats the player, both ante and play wagers are lost. If the player's point value ties with the dealer's point value, both ante and play wagers are pushed.

The Low Points Bonus is an optional side wager that can be placed together with the mandatory wager on the main game before any cards are dealt, and it is resolved at the end of the game. The wager wins if the player's lowest four-card point total is less than or equal to 7 (or 8, depending on the pay table version used). The wager is resolved even if the player folds. The player is paid according to their point total and the pay table configured as described in <u>Table 1a</u> and <u>Table 1b</u>.

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### Table 1a. Low Points Bonus Pay Table

Points	Pay Table 1	Pay Table 2
1 or 2	250 to 1	150 to 1
3 or 4	20 to 1	20 to 1
5 or 6	10 to 1	10 to 1
7	2 to 1	2 to 1

### Table 1b. Low Points Bonus Pay Table

Points	Pay Table 3	Pay Table 4
1 or 2	300 to 1	500 to 1
3 or 4	25 to 1	20 to 1
5 or 6	5 to 1	5 to 1
7 or 8	2 to 1	2 to 1

The High Points Bonus is an optional side wager that can be placed together with the mandatory wager on the main game before any cards are dealt, and it is resolved at the end of the game. The wager wins if the player's lowest four-card point total is greater than or equal to 19. The wager is resolved even if the player folds. The player is paid according to their point total and the pay table configured as described in <u>Table 2</u>.

#### Table 2. High Points Bonus Pay Table

Table 2. Fight Folitts bolius Fay Table				
Points	Pay Table 1	Pay Table 2	Pay Table 3	Pay Table 4
33 - 34	200 to 1	300 to 1	400 to 1	100 to 1
28 - 32	40 to 1	80 to 1	50 to 1	20 to 1
24 - 27	10 to 1	5 to 1	10 to 1	8 to 1
19 - 23	3 to 1	2 to 1	2 to 1	4 to 1

The Progressive Bonus is an optional side wager that can be placed together with the mandatory wager on the main game before any cards are dealt, and it is resolved at the end of the game. The progressive jackpot is seeded with 10,000 bets with an increment contribution of 20%. The wager is paid according to the sum of points in the player's four-card hand and the dealer's four-card hand combined. If the sum is 3 or 4, the player wins 100% of the Jackpot, if the sum is 5 or 6, the player wins 10% of the Jackpot. The wager is not returned if the progressive Jackpot is won. An additional fixed amount of 275 for 1 is won if the sum of the point values is between 7 through 11, inclusive.

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### **Mathematical Analysis**

The analysis for the main wager was performed using an analytical program. The optimal strategy is calculated by iterating over each starting 7-card hand. Each starting hand is then iterated over each 7-card dealer hand from the remaining cards.

The optimal strategy is large and cannot be described in this report. However, a few notes about the optimal strategy can be summarized. It is optimal to raise each hand with a point total of 14 or less and fold each hand with a point total of 16 or more. Furthermore, raise (fold) was observed to be optimal for 93.94% (6.06%) of the hands with a point total of 15.

A return summary of the main wager following the optimal strategy can be found in <u>Table</u> <u>3a</u>. Here, RTP represents the Return to Player, which is the ratio of Average Win to Average Wager. RTH represents the Return to House, also known as the Element of Risk, and is the expected house earnings scaled relative to the Average Wager. The HE is the traditional House Edge measurement, scaled relative to the Initial Wager.

### Table 3a. Main Wager Analysis (Optimal)

Average Wager	1.6697
Average Win	1.6234
RTP	97.23%
RTH	2.77%
HE	4.63%

Return to the player was observed to decrease by 0.01%, if the player decides to raise all hands with a point total of 15 or less. A return summary of the main wager for this sub-optimal strategy can be found in Table 3b.

### Table 3b. Main Wager Analysis (Raise on 15 or less)

Average Wager	1.6747
Average Win	1.6282
RTP	97.22%
RTH	2.78%
HE	4.66%

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The Low Points side bet was analyzed using a program that iterated over each starting hand. The winning probabilities and the resulting returns for the Low Points side bet are listed in <u>Table 4a</u> and <u>Table 4b</u> respectively.

Points	Probability
1 or 2	0.000259
3 or 4	0.013911
5 or 6	0.044871
7	0.032657
7 or 8	0.075711

2	RTP	HE
Pay Table 1	94.86%	5.14%
Pay Table 2	92.27%	7.73%
Pay Table 3	93.59%	6.41%
Pay Table 4	91.80%	8.20%

The High Points side bet was analyzed using a program that iterated over each starting hand. The winning probabilities and the resulting returns for the High Points side bet are listed in <u>Table 5a</u> and <u>Table 5b</u> respectively.

### Table 5a. High Points Probabilities

Probability		
0.000245		
0.004531		
0.020819		
0.119997		

### Table 5b. High Points Analysis

	RTP	HE
Pay Table 1	94.40%	5.60%
Pay Table 2	92.57%	7.43%
Pay Table 3	91.83%	8.17%
Pay Table 4	90.73%	9.27%

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The Progressive Bonus side bet was analyzed using a program that iterated over each starting hand. Each starting hand was then iterated over each dealer hand from the remaining cards. The winning probabilities and the resulting returns for the Progressive Bonus side bet are listed in <u>Table 6a</u> and <u>Table 6b</u> respectively.

	Sum Range	Prob	ability
	3 - 4	0.000	00009
	5 - 6	0.000	00925
	7 - 11	0.002	22183
TUN	U	sive bu	nus Analys
- 100	U	sive bu	
	Seed rement Contrib		10,000 20.00%
Inci	Seed	oution	10,000
Inci	Seed rement Contrib	oution	10,000 20.00%

### Table 6a. Progressive Bonus Probabilities

### Summary

Players who decide to play *Low Four* will observe the maximum RTP of 97.23%, corresponding to a House Edge of 2.77%, when playing optimally and without placing any side wagers.

The minimum individual wager RTP is 81.19%, corresponding to a House Edge of 18.81%. This occurs from the Progressive Bonus side wager.

It should be noted that this evaluation does not cover the review or use of the progressive equipment itself.

### **Concerns Identified:**

The following concerns were raised during the evaluation of the aforementioned game. The details are as follows:

NONE

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### Conclusion

Gaming Laboratories International, LLC attests that it has reviewed the mathematics of the game as submitted by Romito Gaming, LLC, and has performed an independent review of the game play to confirm that the submission documents are accurate.

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

It is declared and affirmed under penalty of perjury that to the best of GLI's knowledge and belief, the GLI certification process was conducted in accordance with Nevada Gaming Control Board's (NGCB) requirements and that the product being certified in this Report meets the requirements of the Nevada Gaming Control Act and all regulations, technical standards, control standards and procedures, policies, and industry notices implemented or issued by the NGCB.

Should you have any questions or need any additional information, please feel free to contact our office.

### Sincerely, GAMING LABORATORIES INTERNATIONAL, LLC

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

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## **APPENDIX I**

### Nevada Test Cases Evaluated and Test Results:

Test Cases Relating to Return Percentage:

Test Case	Version	Test Results
14.040.1 (a)	2.0	Pass ①

 ${\rm \textcircled{O}}$  Please note that the test case listed above is related to Gaming Devices and may factor into determination of suitability for Nevada.



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# **CONTACT US**

