We want to determine the odds of not capturing a single unit with regular impulses, assuming a 4 week banner.

First of all, note that we have 1 initial display and x display resets, where $0 \leq x \leq 9$. That's $1 + x$ full display rolls. For those, we will need to first quantify the odds of getting no 1* on these display rolls. Let $A(n)$ be the probability that you will get n of these displays with 3* and 2*s, with the rest being fully 2*, where $0 \leq n \leq 1 + x$. That would quantify as

$$A(n, x) = \binom{x+1}{n} \left(\frac{28}{100} \times \frac{27}{99} \times \frac{1}{98} \right)^n \left(\frac{28}{100} \times \frac{27}{99} \times \frac{26}{98} \right)^{x+1-n}$$

Then, for these rolls, we know that we will either try to capture the ringleader and fail if it is there, or capture a 2* and fail. Thus, the odds of failure on these $x + 1$ captures are:

$$\begin{aligned} B(n, x) &= \binom{x+1}{n} \left(\frac{28}{100} \times \frac{27}{99} \times \frac{1}{98} \right)^n \left(\frac{28}{100} \times \frac{27}{99} \times \frac{26}{98} \right)^{x+1-n} \left(\frac{3}{4} \right)^n \left(\frac{1}{2} \right)^{x+1-n} \\ &= \binom{x+1}{n} \left(\frac{9}{15400} \right)^n \left(\frac{39}{3850} \right)^{x+1-n} \end{aligned}$$

Let's assume you start with 14 impulses and 0 extra impulses. You earn 55 impulses and 16 extra impulses throughout the banner. This totals up to 85 captures. Everytime you do a capture, you need to reroll. The final reroll does not matter in our probability calculation, so we need to take into account the 84 rerolls. We know that x rerolls are a 2*, which lead to resets, which gives probability

$$C(x) = \left(\frac{26}{98} \right)^x$$

Then, for the remaining $85 - 1 - x = 84 - x$ captures not taken into account from the full display resets, we will have $84 - x$ rerolls too. Let's suppose we have m ringleader appearances in these $84 - x$ rerolls. Thus, the probability of failure here is

$$\begin{aligned} D(m, x) &= \binom{84-x}{m} \left(\frac{1}{98} \right)^m \left(\frac{26}{98} \right)^{84-x-m} \left(\frac{3}{4} \right)^m \left(\frac{1}{2} \right)^{84-x-m} \\ &= \binom{84-x}{m} \left(\frac{3}{392} \right)^m \left(\frac{13}{98} \right)^{84-x-m} \end{aligned}$$

Thus, the probability of failing to capture any unit across the entire banner is

$$
\begin{aligned}
&P(\text{fail}) \\
&= \sum_{x=0}^{9}\sum_{n=0}^{x+1}\sum_{m=0}^{84-x} B(n,x)C(x)D(m,x) \\
&= \sum_{x=0}^{9}\sum_{n=0}^{x+1}\sum_{m=0}^{84-x} \binom{x+1}{n}\left(\frac{9}{15400}\right)^{n}\left(\frac{39}{3850}\right)^{x+1-n}\left(\frac{26}{98}\right)^{x}\binom{84-x}{m}\left(\frac{3}{392}\right)^{m}\left(\frac{13}{98}\right)^{84-x-m}
\end{aligned}
$$

This is a lower bound, since the above sum assumes that the resets are in a fixed position in the sequence. It is hard to quantify the total amount of possible positions for the x resets, since there is a requirement that they have to at least 3 days apart, but we can upper bound this by assuming this requirement does not exist. This gives an additional $\binom{84}{x}$ factor.

Thus, we have

$$
\sum_{x=0}^{9}\sum_{n=0}^{x+1}\sum_{m=0}^{84-x} B(n,x)C(x)D(m,x) \le P(\text{fail}) \le \sum_{x=0}^{9}\sum_{n=0}^{x+1}\sum_{m=0}^{84-x} \binom{84}{x} B(n,x)C(x)D(m,x)
$$