



LLTH.Staking, Cryptodemonz

Author: Kaneda, Lawrence of Arabia.

Requested by Satan himself.

Introduction

The LLTH.staking will be a great opportunity for other projects to give their holders daily rewards. To open a pool in LLTH.staking, the project should comply with our criteria, such as it should have a 10K (With exceptions) supply, it should provide liquidity to LLTH tokens on Uniswap, They should pay for service fees etc. This will be announced as we open our pools publicly.

For many years, NFT staking was a blurred subject, because compared to typical fungible tokens, they don't have objective value. So the question arises, how can we objectively determine their overall value? We have an idea.

An idea

Rarity.tools and such services are popular ways to determine the value of NFT as much objectively as possible, but even in this case, comparison of different NFT's from different collections is not possible.

But that's not our main objective here. We just need the most optimal way to determine how rare is it, and how much LLTH should we mint in exchange. But first, we explore the traits normalization formula:

$$1 \div \frac{n(x)}{n(y)}$$

Where X is the other items with this trait and Y is the total number of items

What we do here is very simple, first, we take the number of other items with given traits and divide it by a number of all items, basically a total supply of project and then we divide it on 1 so we can have a better representation of numbers, instead of 0.00x floats. To get the final rarity score, plug every trait into this formula that will produce the array of numbers and simply the sum of this array will be the rarity score of the given NFT.

We plug demonzv1 rarity in this equation and what we get is, the most casual demonz has a rarity score of 24 while the rarest one produces 342. But this is the case of demonzv1 with its trait count, what about other collections with a casual rarity score of 15000 which is very possible.

Our solution is normalizing the rarity scores into the 24–342 range, roughly 30–350. For example, some x collection has 1200 score for its rarest and 100 for most casual NFT's. What we do is simply multiply this value on some float that will shrink its size into the 30–350 range:

$$30 > normalizator \cdot rarity < 350$$

A perfect number to normalize this x project into 30–350 scale would be 0.224 because:

$$1200 \times 0.224 = 336 \text{ (Rarest)}$$

$$100 \times 0.224 = 22.4 \text{ (Most casual)}$$

Remember our scores for Demonzv1? 24 for the common and 342 for the rarest.

This is relevant because our formula for giving away rewards is based on Demonzv1 24–342 rarity scores range.

Staking rewards

Now, since we covered all the fundamentals about how we objectify rarities, we can safely move to our second equation of how will we handle distributing LLTH rewards based on the above assumptions.

Due to new Uniswap v3 core contracts, determining price isn't as straightforward as it was with the old $x \cdot y = k$ equation. Also, just knowing the initial price won't give us the full picture. Due to volatility and our liquidity boost propositions, price might skyrocket in a day. Thus, we can't depend on that projection.

This is why we planned to launch the staking platform a week after LLTH. And this is exactly why anything down below is subjected to possible modifications but the fundamental idea of calculating the scores will stay the same. Here is the equation that will be used for distributing rewards:

$$\frac{booster \cdot daysStaked \cdot (rarity \cdot normalizer)}{poolSize}$$

The **booster** will be a major part of adjustable variables, it will be used to increase overall rewards. This might be the premium addition that other projects can pay for to have one.

As you can see, compared to other native staking applications, we decided to increase rewards not based on blocks but on the **staking period counted in days**.

As mentioned above, rarity will be **normalized** to produce reasonable rewards that we projected.

And **poolSize** stands for the number of stakers in a given pool, more people come in, fewer rewards will be minted simply to avoid inflation and make other pools are interesting options for potential stakers.

Let's plug some scores into this equation to make some approximate predictions: (we assume that this imaginary pool has a 4x booster and we have 200 people staking)

1) Super NFT

$$\frac{4 \cdot 30 \cdot 350}{200} = 210llth$$

2) Good but not the best

$$\frac{4 \cdot 30 \cdot 200}{200} = 120llth$$

3) Lame one

$$\frac{4 \cdot 30 \cdot 60}{200} = 36llth$$

Conclusion

As you can see, the rewards are somewhat reasonable in terms of the rarity of the staked assets. But again, this is not objective truth, what we did here is just try to normalize everything into the same scale which can be misleading, and sometimes very inaccurate. Even if we try and create universal equations which will be as reasonable as the human mind goes, we can't objectively rate each asset because they have their own value that is created in the community by developers, artists and all the people who dedicated their work time for it. Due to the complexity of this human factor, we will try as much as possible to stay with math, numbers, and traits. Stay safe and tuned for our announcements on the Discord channel.