

# Boss Attack Types

## A) Red Spam Attack

- **Note: As can be seen in the demo the spawn points of these attacks move WITH the boss!**

- 1) Two spawn points spiral out clockwise from the center of the boss. Both spawn points spawn a stream of bullets in player's direction. Spawn points spin out from the boss about 450 degrees before ending vertically above and below the boss.
- 2) One spawn point spirals counter clockwise out from the center of the boss. Spawns a stream of bullets in three equilateral directions, one of which is pointed directly at the player. Spins around the boss about 900 degrees before ending to the left of the boss.
- 3) Two spawn points make a spiral around the boss, one in each direction. As they rotate they rapidly spawn bullets on seemingly random trajectories. It is very hard to tell but the spawn points appear to only rotate around the boss by 360 degrees.

## B) Blue Circular Attack

- 1) Spawns 16 two-stage projectiles radially around the boss. First stage moves outward linearly at high speed till it leaves the immediate vicinity of the boss. Second stage arcs outward at slow speed with decaying arc. Attacks can alternate between clockwise and counter-clockwise rotation.
- 2) Spawns 16 three-stage projectiles radially around the boss. First stage moves outward linearly at high speed till it leave the immediate vicinity of the boss. Second stage appears to spin inwards with a high tangential velocity and slow speed, just enough to make it start bending inward and moves to stage three before it begins to double back on itself. Third stage arcs outward at slow speed with decaying arc. Attacks can alternate between clockwise and counter-clockwise rotation.

## C) Multiplying Ring Attack

- 1) Spawns 26 blue 4-stage projectiles which in their first stage moving radially straight out from the center of the boss. At stage two each projectile spawns another, this time red projectile, and changes trajectory by about 45 degrees, with its child projectile pointed 45 degrees in the other direction from the original trajectory. Stage three the projectiles similarly change their directions again but do not spawn any more. Stage four they all change direction again one last time, however the blue projectiles spawn another set of blue projectiles. The red projectiles simply reflect their trajectory as per usual however the new sets of blues reflect and then appear to divide up blue's former trajectory, with one being above it by about 22.5 degrees and the other below. Besides the trajectory changes the projectiles all move linearly and at fairly constant speed.

## D) Random Yellow Laser Attack

- 1) Spawns 8 yellow points randomly within the vicinity of the boss which seem to also have a random or semi-random trajectory. They move slowly but leave a long trail.

# Boss Stages and Sequence of Attacks

The final boss has four stages, each 45 seconds, with a set of attacks that it repeats until the end of the stage. If a sequence of attacks isn't completed when the stage finishes the attack ends immediately and the boss begins with the new attack sequence.

Stage 1) Starts 1:36, Sequence:

- ⇒ A1
- ⇒ B1 clockwise
- ⇒ B1 counter-clockwise

Stage 2) Starts 2:21, Sequence:

- ⇒ C1

Stage 3) Starts 3:06, Sequence:

- ⇒ B2 counter-clockwise
- ⇒ B2 clockwise
- ⇒ A2

Stage 4) Starts 3:52, Sequence:

- ⇒ D1
- ⇒ A3