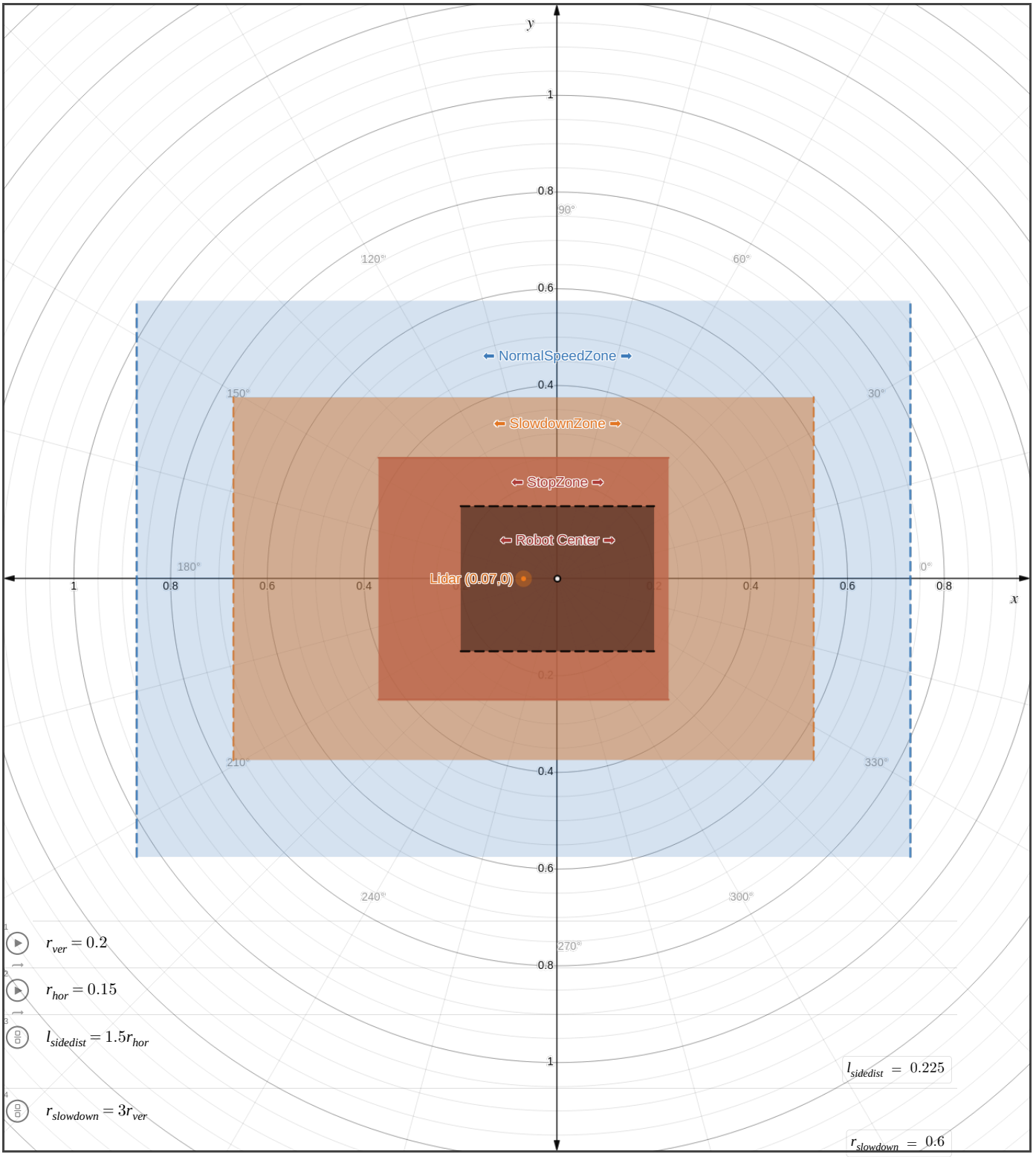

1 $r_{ver} = 0.2$

2 $r_{hor} = 0.15$

3 $l_{sidedist} = 1.5 r_{hor}$

$l_{sidedist} = 0.225$

4 $r_{slowdown} = 3 r_{ver}$

$r_{slowdown} = 0.6$

5 $l_{normalsidedist} = 2.5 r_{hor}$

$l_{normalsidedist} = 0.375$

6 $r_{normal} = 4 r_{ver}$

$r_{normal} = 0.8$

7 $x_{lidar} = 0.07$

8 $l_{safetyoffset} = 0.1$

9 $E_{stat} = 0.02$

10 $E_{syst} = 0.03$

11 $E_{totalmax} = \sqrt{E_{syst}^2 + E_{stat}^2}$

$E_{totalmax} = 0.0360555127546$

12 $-r_{hor} - l_{safetyoffset} \le y \le r_{hor} + l_{safetyoffset} \left\{ -x_{lidar} - r_{ver} - l_{safetyoffset} \le x \le l_{safetyoffset} + r_{ver} - x_{lidar} \right\}$

13 $-r_{slowdown} - x_{lidar} < x < r_{slowdown} - x_{lidar} \left\{ -l_{sidedist} - r_{hor} \le y \le l_{sidedist} + r_{hor} \right\}$

14 $-r_{normal} - x_{lidar} < x < r_{normal} - x_{lidar} \left\{ -l_{normalsidedist} - r_{ver} \le y \le l_{normalsidedist} + r_{ver} \right\}$

15 $-r_{hor} < y < r_{hor} \left\{ -r_{ver} \le x \le r_{ver} \right\}$

16 $(-x_{lidar}, 0)$

17 $(0, 0.0)$

18 $(0, 0.08)$

19 $(0, 0.2)$

20 $(0, 0.32)$

21 $(0, 0.46)$