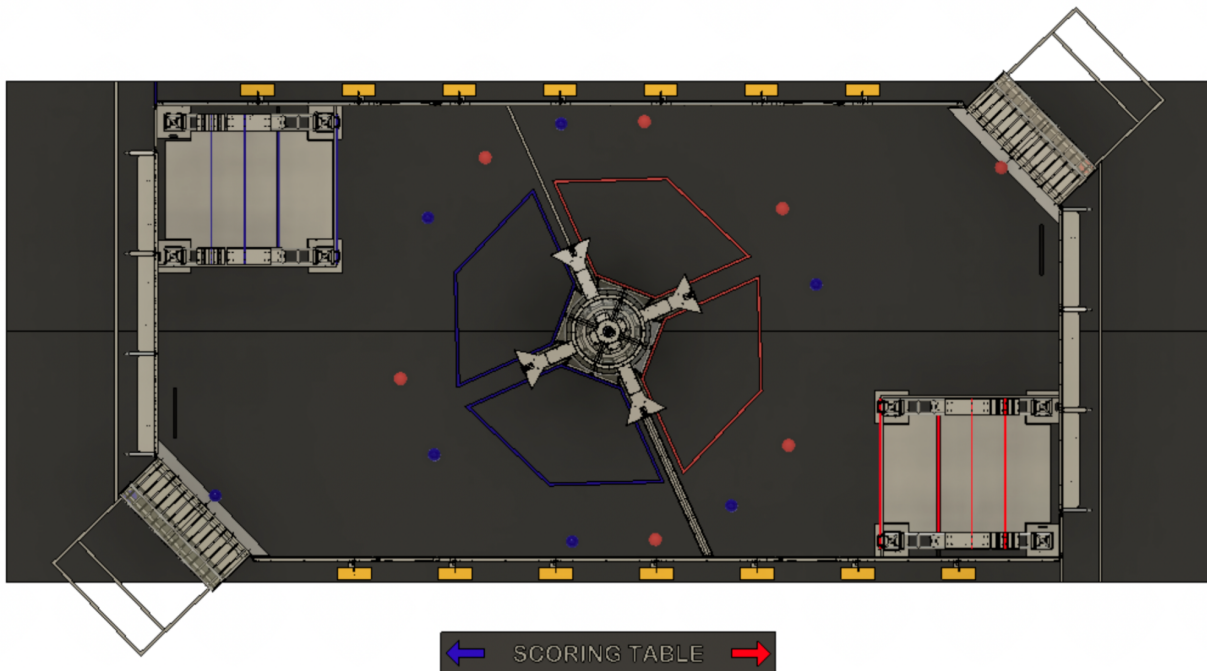


# RAPID REACT Tag Pose Information



## Coordinate System

The XYZ "Zero" coordinate is located on the carpet (Z) at the intersection of the XZ and YZ planes on the field-face of the field perimeter polycarbonate (XZ) and alliance station diamond plate (YZ). Thus, the (0,0,0) coordinate is located near the human-placer edge of the terminal. +Z is up into the air from the carpet, +X is horizontal (in this image above) toward the opposing alliance stations, and +Y runs from the terminal to the hangar.

The face-pose of the tags is denoted by 2 degree representations. The first is the rotation around the Z axis, with 0° facing the opposite alliance station rotating positively in the counterclockwise direction, and the second is rotation around the Y axis with 0° also facing the opposite alliance station with positive rotation counterclockwise (positive rotation of 90° faces the floor).

Distances are measured to the center of the tag.

## Tag Locations from the Blue Alliance Perspective

Tag	Location	X	Y	Z	Z-Rot	Y-Rot
00	Blue Hangar Panel	-0.139 in (-0.004 m)	298.383 in (7.579 m)	34.876 in (0.886 m)	0°	0°
01	Blue Hangar Truss - Hub	127.272 in (3.233 m)	216.01 in (5.487 m)	67.932 in (1.725 m)	0°	0°
02	Blue Hangar Truss - Side	120.78 in (3.068 m)	209.863 in (5.331 m)	54.182 in (1.376 m)	-90°	0°
03	Blue Station 2 Wall	0.157 in (0.004 m)	199.155 in (5.059 m)	31.75 in (0.806 m)	0°	0°
04	Blue Station 3 Wall	0.157 in (0.004 m)	138.287 in (3.512 m)	31.75 in (0.806 m)	0°	0°
05	Blue Terminal Near Station	4.768 in (0.121 m)	67.631 in (1.718 m)	35.063 in (0.891 m)	46.25°	0°
06	Blue Mid Terminal	34.382 in (0.873 m)	37.059 in (0.941 m)	35.063 in (0.891 m)	46.25°	0°
07	Blue End Terminal	63.586 in (1.615 m)	6.191 in (0.157 m)	35.063 in (0.891 m)	46.25°	0°
10	Red Hangar Panel	648.139 in (16.463 m)	25.617 in (0.651 m)	34.876 in (0.886 m)	180°	0°
11	Red Hangar Truss - Hub	521.063 in (13.235 m)	108.01 in (2.743 m)	67.932 in (1.725 m)	180°	0°
12	Red Hangar Truss - Side	527.22 in (13.391 m)	114.167 in (2.90 m)	54.182 in (1.376 m)	90°	0°
13	Red Station 2 Wall	647.843 in (16.455 m)	125.02 in (3.176 m)	31.75 in (0.806 m)	180°	0°
14	Red Station 3 Wall	647.843 in (16.455 m)	185.714 in (4.717 m)	31.75 in (0.806 m)	180°	0°
15	Red Terminal Near Station	643.111 in (16.335 m)	256.495 in (6.515 m)	35.188 in (0.894 m)	223.8°	0°
16	Red Mid Terminal	613.799 in (15.59 m)	287.114 in (7.293 m)	35.063 in (0.891 m)	223.8°	0°
17	Red End Terminal	584.535 in (14.847 m)	317.682 in (8.069 m)	35.063 in (0.891 m)	223.8°	0°

40	Lower Hub Far Exit	310.005 in (7.874 m)	193.432 in (4.913 m)	27.688 in (0.703 m)	114°	0°
41	Lower Hub Blue Exit	292.568 in (7.431 m)	148.005 in (3.759 m)	27.688 in (0.703 m)	204°	0°
42	Lower Hub Near Exit	337.995 in (8.585 m)	130.568 in (3.316 m)	27.688 in (0.703 m)	-66°	0°
43	Lower Hub Red Exit	355.432 in (9.028 m)	175.995 in (4.47 m)	27.688 in (0.703 m)	24°	0°
50	Upper Hub Far-Blue	302.324 in (7.679 m)	170.321 in (4.326 m)	95.186 in (2.418 m)	159°	26.75°
51	Upper Hub Blue-Near	315.679 in (8.018 m)	140.324 in (3.564 m)	95.186 in (2.418 m)	339°	26.75°
52	Upper Hub Near-Red	345.676 in (8.78 m)	153.679 in (3.903 m)	95.186 in (2.418 m)	249°	26.75°
53	Upper Hub Red-Far	332.321 in (8.441 m)	183.676 in (4.665 m)	95.186 in (2.418 m)	69°	26.75°

## Revision History

15-Oct-2022

Updated position of Tag 04 to correct a copy-pasta error.