

EV × LA Outcome Matrix (MLB Statcast BIP, 2023–2025)

Spray Slice: -45° to -30°

Cell format: .AVG (hit probability on BIP) + XBH=##% (2B+3B+HR rate on BIP)

EV × LA Outcome Matrix (MLB Statcast BIP, 2023–2025)

Spray Slice: -30° to -15°

Cell format: .AVG (hit probability on BIP) + XBH=##% (2B+3B+HR rate on BIP)

EV x LA Outcome Matrix (MLB Statcast BIP, 2023–2025)

Spray Slice: -15° to 0°

Cell format: .AVG (hit probability on BIP) + XBH=##% (2B+3B+HR rate on BIP)

EV \ LA	0–4	4–8	8–12	12–16	16–20	20–24	24–28	28–32	32–36	36–40
80–83	0.333 avg XBH=0%	0.369 avg XBH=0%	0.500 avg XBH=0%	0.858 avg XBH=0%	0.981 avg XBH=2%	0.611 avg XBH=4%	0.131 avg XBH=2%	0.029 avg XBH=1%	0.000 avg XBH=0%	0.000 avg XBH=0%
83–86	0.319 avg XBH=0%	0.403 avg XBH=0%	0.599 avg XBH=0%	0.919 avg XBH=2%	0.925 avg XBH=2%	0.398 avg XBH=4%	0.069 avg XBH=1%	0.000 avg XBH=0%	0.000 avg XBH=0%	0.000 avg XBH=0%
86–89	0.301 avg XBH=0%	0.460 avg XBH=1%	0.682 avg XBH=2%	0.971 avg XBH=2%	0.692 avg XBH=1%	0.179 avg XBH=5%	0.013 avg XBH=1%	0.009 avg XBH=1%	0.000 avg XBH=0%	0.006 avg XBH=1%
89–92	0.394 avg XBH=1%	0.592 avg XBH=1%	0.650 avg XBH=2%	0.957 avg XBH=3%	0.537 avg XBH=7%	0.095 avg XBH=4%	0.021 avg XBH=1%	0.000 avg XBH=0%	0.000 avg XBH=0%	0.000 avg XBH=0%
92–95	0.492 avg XBH=0%	0.571 avg XBH=1%	0.791 avg XBH=2%	0.902 avg XBH=6%	0.396 avg XBH=12%	0.143 avg XBH=11%	0.047 avg XBH=4%	0.027 avg XBH=2%	0.009 avg XBH=1%	0.007 avg XBH=1%
95–98	0.495 avg XBH=1%	0.687 avg XBH=2%	0.861 avg XBH=4%	0.828 avg XBH=13%	0.373 avg XBH=18%	0.140 avg XBH=13%	0.105 avg XBH=10%	0.058 avg XBH=6%	0.027 avg XBH=3%	0.013 avg XBH=1%
98–101	0.521 avg XBH=1%	0.636 avg XBH=4%	0.867 avg XBH=7%	0.747 avg XBH=16%	0.306 avg XBH=24%	0.228 avg XBH=23%	0.214 avg XBH=21%	0.159 avg XBH=16%	0.061 avg XBH=6%	0.010 avg XBH=1%
101–104	0.585 avg XBH=1%	0.677 avg XBH=4%	0.937 avg XBH=14%	0.653 avg XBH=22%	0.334 avg XBH=29%	0.445 avg XBH=44%	0.517 avg XBH=51%	0.429 avg XBH=43%	0.237 avg XBH=24%	0.051 avg XBH=5%
104–107	0.601 avg XBH=3%	0.720 avg XBH=7%	0.902 avg XBH=15%	0.616 avg XBH=29%	0.469 avg XBH=43%	0.731 avg XBH=72%	0.822 avg XBH=82%	0.718 avg XBH=72%	0.469 avg XBH=47%	0.194 avg XBH=19%
107–110	0.675 avg XBH=2%	0.790 avg XBH=14%	0.917 avg XBH=25%	0.642 avg XBH=43%	0.656 avg XBH=64%	0.903 avg XBH=90%	0.952 avg XBH=95%	0.906 avg XBH=90%	0.695 avg XBH=69%	0.250 avg XBH=25%
110–113	0.670 avg XBH=7%	0.798 avg XBH=18%	0.874 avg XBH=32%	0.673 avg XBH=50%	0.771 avg XBH=73%	0.971 avg XBH=97%	0.978 avg XBH=98%	0.968 avg XBH=97%	0.952 avg XBH=95%	0.667 avg XBH=67%
113–116	0.737 avg XBH=11%	0.720 avg XBH=28%	0.958 avg XBH=42%	0.792 avg XBH=75%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%		
116–119	1.000 avg XBH=100%	1.000 avg XBH=25%	1.000 avg XBH=50%	0.250 avg XBH=25%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%			
119–122				1.000 avg XBH=100%						

EV x LA Outcome Matrix (MLB Statcast BIP, 2023–2025)

Spray Slice: 0° to 15°

Cell format: .AVG (hit probability on BIP) + XBH=##% (2B+3B+HR rate on BIP)

EV \ LA	0–4	4–8	8–12	12–16	16–20	20–24	24–28	28–32	32–36	36–40
80–83	0.392 avg XBH=1%	0.400 avg XBH=0%	0.507 avg XBH=0%	0.831 avg XBH=0%	0.972 avg XBH=1%	0.528 avg XBH=2%	0.097 avg XBH=1%	0.013 avg XBH=0%	0.014 avg XBH=1%	0.000 avg XBH=0%
83–86	0.338 avg XBH=0%	0.563 avg XBH=1%	0.560 avg XBH=0%	0.933 avg XBH=0%	0.860 avg XBH=2%	0.337 avg XBH=3%	0.061 avg XBH=2%	0.021 avg XBH=2%	0.000 avg XBH=0%	0.000 avg XBH=0%
86–89	0.532 avg XBH=0%	0.538 avg XBH=1%	0.660 avg XBH=0%	0.973 avg XBH=3%	0.709 avg XBH=3%	0.176 avg XBH=2%	0.050 avg XBH=2%	0.000 avg XBH=0%	0.000 avg XBH=0%	0.005 avg XBH=0%
89–92	0.527 avg XBH=0%	0.645 avg XBH=1%	0.688 avg XBH=0%	0.952 avg XBH=3%	0.553 avg XBH=8%	0.117 avg XBH=6%	0.040 avg XBH=4%	0.009 avg XBH=1%	0.004 avg XBH=0%	0.000 avg XBH=0%
92–95	0.676 avg XBH=0%	0.729 avg XBH=0%	0.783 avg XBH=2%	0.889 avg XBH=4%	0.377 avg XBH=10%	0.082 avg XBH=5%	0.038 avg XBH=4%	0.017 avg XBH=2%	0.003 avg XBH=0%	0.000 avg XBH=0%
95–98	0.657 avg XBH=0%	0.695 avg XBH=2%	0.843 avg XBH=3%	0.824 avg XBH=7%	0.293 avg XBH=15%	0.111 avg XBH=11%	0.055 avg XBH=5%	0.029 avg XBH=3%	0.014 avg XBH=1%	0.000 avg XBH=0%
98–101	0.682 avg XBH=1%	0.716 avg XBH=1%	0.868 avg XBH=5%	0.701 avg XBH=10%	0.242 avg XBH=13%	0.191 avg XBH=19%	0.191 avg XBH=19%	0.150 avg XBH=15%	0.047 avg XBH=5%	0.006 avg XBH=1%
101–104	0.672 avg XBH=1%	0.768 avg XBH=2%	0.899 avg XBH=10%	0.619 avg XBH=16%	0.270 avg XBH=22%	0.339 avg XBH=33%	0.465 avg XBH=47%	0.400 avg XBH=40%	0.182 avg XBH=18%	0.042 avg XBH=4%
104–107	0.687 avg XBH=1%	0.755 avg XBH=4%	0.878 avg XBH=13%	0.597 avg XBH=20%	0.389 avg XBH=34%	0.638 avg XBH=63%	0.773 avg XBH=77%	0.662 avg XBH=66%	0.459 avg XBH=46%	0.176 avg XBH=18%
107–110	0.693 avg XBH=1%	0.777 avg XBH=6%	0.904 avg XBH=17%	0.542 avg XBH=31%	0.577 avg XBH=53%	0.846 avg XBH=85%	0.929 avg XBH=93%	0.873 avg XBH=87%	0.696 avg XBH=68%	0.500 avg XBH=50%
110–113	0.726 avg XBH=4%	0.773 avg XBH=8%	0.899 avg XBH=23%	0.542 avg XBH=40%	0.732 avg XBH=70%	0.937 avg XBH=94%	1.000 avg XBH=100%	1.000 avg XBH=100%	0.583 avg XBH=58%	0.400 avg XBH=40%
113–116	0.667 avg XBH=0%	0.786 avg XBH=21%	0.900 avg XBH=25%	0.538 avg XBH=46%	0.800 avg XBH=80%	1.000 avg XBH=100%	1.000 avg XBH=100%	0.750 avg XBH=75%	1.000 avg XBH=100%	1.000 avg XBH=100%
116–119	1.000 avg XBH=0%	1.000 avg XBH=0%	1.000 avg XBH=0%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%			
119–122		1.000 avg XBH=0%		1.000 avg XBH=0%	1.000 avg XBH=100%					

EV x LA Outcome Matrix (MLB Statcast BIP, 2023–2025)

Spray Slice: 15° to 30°

Cell format: .AVG (hit probability on BIP) + XBH=##% (2B+3B+HR rate on BIP)

EV \ LA	0–4	4–8	8–12	12–16	16–20	20–24	24–28	28–32	32–36	36–40
80–83	0.199 avg XBH=1%	0.297 avg XBH=0%	0.346 avg XBH=0%	0.789 avg XBH=0%	0.932 avg XBH=1%	0.468 avg XBH=3%	0.070 avg XBH=3%	0.007 avg XBH=0%	0.000 avg XBH=0%	0.000 avg XBH=0%
83–86	0.247 avg XBH=0%	0.306 avg XBH=0%	0.450 avg XBH=0%	0.907 avg XBH=0%	0.806 avg XBH=1%	0.295 avg XBH=3%	0.045 avg XBH=2%	0.000 avg XBH=0%	0.000 avg XBH=0%	0.000 avg XBH=0%
86–89	0.339 avg XBH=0%	0.441 avg XBH=0%	0.561 avg XBH=0%	0.945 avg XBH=1%	0.669 avg XBH=4%	0.171 avg XBH=4%	0.017 avg XBH=1%	0.004 avg XBH=0%	0.000 avg XBH=0%	0.000 avg XBH=0%
89–92	0.307 avg XBH=0%	0.405 avg XBH=0%	0.594 avg XBH=0%	0.933 avg XBH=4%	0.523 avg XBH=5%	0.128 avg XBH=7%	0.029 avg XBH=3%	0.015 avg XBH=2%	0.008 avg XBH=1%	0.008 avg XBH=0%
92–95	0.336 avg XBH=0%	0.428 avg XBH=0%	0.703 avg XBH=1%	0.897 avg XBH=5%	0.401 avg XBH=9%	0.098 avg XBH=6%	0.077 avg XBH=7%	0.057 avg XBH=6%	0.034 avg XBH=3%	0.015 avg XBH=1%
95–98	0.362 avg XBH=1%	0.458 avg XBH=1%	0.712 avg XBH=2%	0.778 avg XBH=9%	0.384 avg XBH=19%	0.224 avg XBH=21%	0.299 avg XBH=29%	0.211 avg XBH=21%	0.110 avg XBH=10%	0.015 avg XBH=2%
98–101	0.397 avg XBH=0%	0.529 avg XBH=2%	0.779 avg XBH=5%	0.785 avg XBH=16%	0.365 avg XBH=26%	0.413 avg XBH=38%	0.601 avg XBH=59%	0.550 avg XBH=55%	0.326 avg XBH=32%	0.109 avg XBH=11%
101–104	0.454 avg XBH=1%	0.564 avg XBH=2%	0.799 avg XBH=8%	0.738 avg XBH=21%	0.507 avg XBH=45%	0.736 avg XBH=72%	0.866 avg XBH=86%	0.816 avg XBH=82%	0.634 avg XBH=63%	0.329 avg XBH=33%
104–107	0.465 avg XBH=2%	0.517 avg XBH=4%	0.855 avg XBH=16%	0.675 avg XBH=29%	0.594 avg XBH=55%	0.898 avg XBH=88%	0.973 avg XBH=97%	0.930 avg XBH=93%	0.845 avg XBH=84%	0.590 avg XBH=59%
107–110	0.489 avg XBH=2%	0.569 avg XBH=7%	0.839 avg XBH=20%	0.682 avg XBH=32%	0.734 avg XBH=67%	0.958 avg XBH=94%	0.994 avg XBH=99%	0.991 avg XBH=99%	0.942 avg XBH=94%	0.808 avg XBH=81%
110–113	0.551 avg XBH=1%	0.588 avg XBH=15%	0.828 avg XBH=22%	0.692 avg XBH=37%	0.845 avg XBH=71%	1.000 avg XBH=98%	0.980 avg XBH=98%	1.000 avg XBH=100%	1.000 avg XBH=100%	0.500 avg XBH=50%
113–116	0.636 avg XBH=18%	0.647 avg XBH=24%	0.900 avg XBH=30%	0.600 avg XBH=32%	0.895 avg XBH=84%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%	
116–119	0.000 avg XBH=0%	0.667 avg XBH=0%	1.000 avg XBH=0%	1.000 avg XBH=100%	0.833 avg XBH=67%	1.000 avg XBH=100%	1.000 avg XBH=100%		1.000 avg XBH=100%	
119–122	0.000 avg XBH=0%			0.000 avg XBH=0%			1.000 avg XBH=100%			

EV x LA Outcome Matrix (MLB Statcast BIP, 2023–2025)

Spray Slice: 30° to 45°

Cell format: .AVG (hit probability on BIP) + XBH=##% (2B+3B+HR rate on BIP)

EV \ LA	0–4	4–8	8–12	12–16	16–20	20–24	24–28	28–32	32–36	36–40
80–83	0.285 avg XBH=3%	0.376 avg XBH=3%	0.577 avg XBH=3%	0.931 avg XBH=7%	0.961 avg XBH=10%	0.607 avg XBH=10%	0.191 avg XBH=7%	0.043 avg XBH=3%	0.024 avg XBH=1%	0.008 avg XBH=1%
83–86	0.309 avg XBH=1%	0.359 avg XBH=2%	0.637 avg XBH=4%	0.960 avg XBH=12%	0.865 avg XBH=10%	0.389 avg XBH=10%	0.079 avg XBH=5%	0.063 avg XBH=5%	0.006 avg XBH=1%	0.000 avg XBH=0%
86–89	0.330 avg XBH=1%	0.538 avg XBH=7%	0.705 avg XBH=3%	0.974 avg XBH=14%	0.681 avg XBH=8%	0.251 avg XBH=12%	0.086 avg XBH=8%	0.041 avg XBH=4%	0.020 avg XBH=2%	0.005 avg XBH=1%
89–92	0.476 avg XBH=3%	0.518 avg XBH=6%	0.758 avg XBH=6%	0.952 avg XBH=13%	0.524 avg XBH=12%	0.218 avg XBH=15%	0.093 avg XBH=9%	0.060 avg XBH=5%	0.048 avg XBH=5%	0.018 avg XBH=2%
92–95	0.511 avg XBH=6%	0.531 avg XBH=2%	0.812 avg XBH=10%	0.872 avg XBH=14%	0.451 avg XBH=20%	0.162 avg XBH=15%	0.248 avg XBH=22%	0.237 avg XBH=24%	0.154 avg XBH=15%	0.037 avg XBH=4%
95–98	0.527 avg XBH=2%	0.601 avg XBH=6%	0.887 avg XBH=13%	0.823 avg XBH=22%	0.380 avg XBH=22%	0.319 avg XBH=28%	0.374 avg XBH=36%	0.467 avg XBH=47%	0.419 avg XBH=41%	0.249 avg XBH=25%
98–101	0.519 avg XBH=4%	0.630 avg XBH=7%	0.884 avg XBH=17%	0.747 avg XBH=23%	0.423 avg XBH=29%	0.538 avg XBH=48%	0.699 avg XBH=68%	0.742 avg XBH=73%	0.704 avg XBH=70%	0.404 avg XBH=40%
101–104	0.617 avg XBH=7%	0.672 avg XBH=7%	0.905 avg XBH=22%	0.742 avg XBH=26%	0.557 avg XBH=40%	0.720 avg XBH=66%	0.935 avg XBH=92%	0.945 avg XBH=95%	0.928 avg XBH=93%	0.800 avg XBH=80%
104–107	0.637 avg XBH=5%	0.724 avg XBH=9%	0.925 avg XBH=25%	0.752 avg XBH=34%	0.632 avg XBH=48%	0.913 avg XBH=83%	0.974 avg XBH=97%	1.000 avg XBH=99%	0.959 avg XBH=96%	0.943 avg XBH=94%
107–110	0.589 avg XBH=6%	0.678 avg XBH=9%	0.967 avg XBH=27%	0.853 avg XBH=41%	0.754 avg XBH=56%	0.970 avg XBH=91%	1.000 avg XBH=99%	1.000 avg XBH=100%	1.000 avg XBH=100%	0.972 avg XBH=97%
110–113	0.690 avg XBH=4%	0.736 avg XBH=17%	0.929 avg XBH=33%	0.798 avg XBH=39%	0.887 avg XBH=75%	0.986 avg XBH=94%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%
113–116	0.875 avg XBH=0%	0.538 avg XBH=15%	1.000 avg XBH=44%	0.680 avg XBH=56%	0.923 avg XBH=73%	0.950 avg XBH=95%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%	1.000 avg XBH=100%
116–119	0.000 avg XBH=0%	0.500 avg XBH=0%	1.000 avg XBH=50%	1.000 avg XBH=100%			1.000 avg XBH=100%	1.000 avg XBH=100%		
119–122		1.000 avg XBH=0%	1.000 avg XBH=100%	0.000 avg XBH=0%			1.000 avg XBH=100%			