

Quick Reference Handbook



Takeoff Planning Tables, Flaps 20°

Flaps 20°

APA Sea Level

OAT° C	-20	-10	0	+10	+20	+30	+40			
Weight	V ₁ (BFL)							V _R	V ₂	V _{FS}
24,650	125 (5000)	125 (5300)	125 (5700)	125 (5800)	-	-	-	129	137	185
24,000	122 (4800)	122 (5000)	122 (5400)	122 (5500)	123 (5700)	-	-	127	136	182
23,500	120 (4600)	121 (4800)	121 (5200)	121 (5300)	121 (5500)	-	-	126	135	180
23,000	119 (4500)	119 (4700)	119 (4900)	119 (5100)	120 (5300)	-	-	125	134	178
22,000	116 (4200)	116 (4400)	116 (4500)	116 (4600)	117 (4900)	117 (5400)	-	122	131	174
21,000	112 (3900)	112 (4100)	112 (4300)	112 (4400)	113 (4600)	-	-	119	128	170
20,000	108 (3600)	108 (3800)	108 (4000)	108 (4100)	109 (4300)	-	-	117	126	166
19,000	104 (3300)	104 (3500)	104 (3700)	104 (3800)	104 (3900)	-	-	-	123	162
18,000	99 (3100)	99 (3200)	100 (3400)	100 (3500)	100 (3600)	-	-	-	120	158
17,000	94 (2800)	95 (2900)	95 (3100)	95 (3200)	95 (3300)	98 (3600)	-	-	-	153
16,000	91* (2600)	91* (2900)	91* (3000)	91* (3000)	91* (3100)	93 (3300)	-	-	-	-

OAT° C	-20	-15	-10	-5	0	5	10	15	20
N ₁	89.0	89.9	90.7	91.6	92.3	93.2	94.1	94.8	95.5