Cessna
TEXTRON AVIATION

CITATION M2

FLIGHT PLANNING GUIDE

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This Flight Planning Guide is published for the purpose of evaluating the performance of the Cessna Citation M2 (Model 525-0800 and on). This guide is developed from data contained in the Citation M2 Aircraft Flight Manual and Electronic Operating Manual. **This document is not to be used in place of the FAA approved Aircraft Flight Manual or the Electronic Operating Manual.** The data included herein does not constitute an offer and is subject to change without notice.

Revisions: FMC-01, 525OMC-00

SPECIFICATIONS

General		
Certification Status	14 CFR Part 23 [1]	
Engines		
Manufacturer	Williams International	
Model	(2) FJ44-1AP-21	
Thrust Output at S.L. (each)	1,965 lb	8.74 kN
Flat Rating Temperature	72 °F	22 °C
Overhaul Interval (TBO)	3,500 hours	
Exterior Dimensions		
Length	42 ft 7 in	12.98 m
Height	13 ft 11 in	4.24 m
Wing Span	47 ft 3 in	14.40 m
Landing Gear Wheelbase	15 ft 4 in	4.67 m
Landing Gear Tread	13 ft 0 in	3.96 m
Internal Dimensions (with typical interior installed)		
Length - overall	15 ft 9 in	4.80 m
Length - excluding cockpit	11 ft 0 in	3.35 m
Height	57 in	1.45 m
Width	58 in	1.47 m
Passenger Cabin Volume	198 ft^3	5.61 m^3
Accommodations		
Passenger Seating - typical	7	
Baggage Capacity	46 ft^3	1.29 m^3
	725 lb	329 kg
Pressurization		
Differential	8.5 psi	0.59 bar
Sea Level Cabin to	22,027 ft	6,714 m
Cabin Altitude at Certified Ceiling (41,000 ft)	8,000 ft	2,438 m
Altitudes		
Certified Ceiling	41,000 ft	12,497 m
Service Ceiling - 1 Engine (MTOW)	26,800 ft	8,169 m
Typical Cruise Altitudes	FL 350 - 410	

1. The Citation M2 is designed to CFR 14 Part 25 standards and certified by CFR 14 Part 23. All takeoff and landing performance is based on Part 25 criteria.

SPECIFICATIONS

Basic Performance		
Takeoff Distance, Sea Level, ISA, MTOW	3,210 ft	978 m
Landing Distance, Sea Level, ISA, MLW	2,590 ft	789 m
Rate of Climb - 2 Engines	3,698 ft/min	1,127 m/min
Rate of Climb - 1 Engine	1,075 ft/min	328 m/min
Typical Cruise Speeds	380-400 ktas	705-740 km/hr
Airspeed Limitations		
Maximum Operating Limit		
MMO (30,500 ft / 9,296 m and above)	M 0.71 Indicated	
VMO (Sea Level to 30,500 ft / 9,296 m)	263 KIAS	487 km/hr
Maximum Flap Extended Speed (VFE)		
Takeoff & Approach Position (15°)	200 KIAS	371 km/hr
Land Position (35°)	161 KIAS	298 km/hr
Max Landing Gear Extended Speed (V_{LE})	186 KIAS	345 km/hr
Max Landing Gear Oper - Extending (V_{LO})	186 KIAS	345 km/hr
Max Landing Gear Oper - Retracting (V_{LO})	175 KIAS	324 km/hr
Max. Speed Brake Operation Speed (V_{SB})	No limit	No limit
Minimum Control Speed, Air (V_{MCA})		
Flaps - 0°	86 KIAS	159 km/hr
Flaps - 15°	77 KIAS	143 km/hr
Minimum Control Speed, Ground (V_{MCG})	89 KIAS	165 km/hr
Certified Weights		
Maximum Ramp Weight	10,800 lb	4,899 kg
Maximum Takeoff Weight	10,700 lb	4,853 kg
Maximum Landing Weight	9,900 lb	4,491 kg
Maximum Zero Fuel Weight	8,400 lb	3,810 kg
Maximum Fuel Capacity (6.7 lb/gal)	3,296 lb	1,495 kg
Basic Operating Weight		
Typically-Equipped Empty Weight	6,790 lb	3,080 kg
1 Pilot & Stores	200 lb	91 kg
Basic Operating Weight (BOW)	6,990 lb	3,171 kg
Payload		
Useful Payload and Fuel	3,810 lb	1,728 kg
Maximum Payload	1,410 lb	640 kg
Payload with Full Fuel	514 lb	233 kg

TAKEOFF PERFORMANCE

Although the aircraft is certified under 14 CFR Part 23, Cessna publishes all takeoff performance for the Citation M2 using Part 25 criteria. Part 25 defines takeoff distance as the greater of accelerate-stop, accelerate-go with one engine inoperative, or 115% of the all engine takeoff distance to a point 35 feet above the runway. At the higher elevations and weights, brake energy may be limiting. These factors are reflected in the takeoff field lengths presented.

Climb limitations are presented at the bottom of each takeoff field length table. Climb refers to the ability of the aircraft to meet certain climb rates after takeoff with one engine inoperative and are a function of temperature, elevation and aircraft weight.

Two flap settings are shown for the aircraft: 15° and 0°. A flap setting of 15° is preferred to minimize runway length and runway speeds. In those situations where second segment climb requirements are too limiting for 15° of flaps, a 0° flap setting is available. A 0° flap setting requires greater runway length but provides greater second segment climb capability.

A paved, level, dry runway with zero wind is assumed. Runway lengths shown are based on the aircraft's anti-ice systems being off and the cabin bleed air on.

DECISION, ROTATION & TAKEOFF SAFETY SPEEDS (KIAS)
Sea Level, Dry Runway, ISA, Zero Wind, Anti-Ice Off

	Flaps - 15° Setting			Flaps - 0° Setting		
Takeoff Weight (lb)	Decision Speed V_1	Rotation Speed V_R	Safety Speed V_2	Decision Speed V_1	Rotation Speed V_R	Safety Speed V_2
10,700	100	105	111	105	111	119
10,300	98	103	109	104	108	117
9,900	96	100	107	102	105	115
9,500	96	99	106	99	102	113
9,000	96	98	106	97	99	110
8,500	96	98	107	97	99	110
8,000	97	98	108	97	99	111
7,500	97	98	108	97	99	112

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = Sea Level

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
0 / 32	3,040	2,810	2,590	2,510	2,450	2,410	2,370	2,350
10 / 50	3,150	2,910	2,680	2,610	2,550	2,510	2,470	2,440
15 / 59	3,210	2,960	2,730	2,660	2,610	2,550	2,510	2,490
20 / 68	3,270	3,010	2,780	2,720	2,660	2,600	2,560	2,530
25 / 77	3,450	3,180	2,930	2,690	2,610	2,550	2,500	2,470
30 / 86	3,750	3,380	3,110	2,860	2,560	2,490	2,440	2,390
35 / 95	4,160	3,710	3,310	3,030	2,720	2,440	2,370	2,330
40 / 104	4,590	4,120	3,670	3,240	2,890	2,590	2,340	2,260
45 / 113	5,200	4,680	4,160	3,670	3,120	2,770	2,490	2,240
50 / 122	—	5,360	4,820	4,280	3,620	3,020	2,680	2,390
Climb Wght Temp Limits °C/°F	46/115	49/120	53/127	54/129	54/129	54/129	54/129	54/129
Field Length at Temp Limits (ft)	5,340	5,220	5,240	4,830	4,140	3,460	2,860	2,540

Elevation = 1,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
0 / 32	3,170	2,930	2,700	2,600	2,540	2,490	2,450	2,420
10 / 50	3,290	3,030	2,800	2,710	2,650	2,590	2,550	2,520
15 / 59	3,350	3,090	2,850	2,760	2,700	2,640	2,600	2,570
20 / 68	3,460	3,180	2,930	2,780	2,720	2,660	2,610	2,580
25 / 77	3,690	3,390	3,110	2,860	2,650	2,590	2,540	2,490
30 / 86	4,120	3,660	3,320	3,040	2,730	2,520	2,460	2,420
35 / 95	4,570	4,090	3,630	3,250	2,910	2,600	2,400	2,340
40 / 104	5,070	4,550	4,070	3,610	3,110	2,780	2,480	2,290
45 / 113	—	5,220	4,680	4,140	3,490	2,980	2,670	2,380
50 / 122	—	—	5,370	4,810	4,110	3,430	2,890	2,560
Climb Wght Temp Limits °C/°F	43/109	46/115	49/120	52/126	52/126	52/126	52/126	52/126
Field Length at Temp Limits (ft)	5,480	5,360	5,230	5,090	4,390	3,690	3,010	2,650

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 2,000 Feet								
	Takeoff Weight (lb)							
Ambient Temp °C / °F	10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
0 / 32	3,300	3,040	2,800	2,700	2,640	2,590	2,550	2,510
10 / 50	3,420	3,150	2,900	2,820	2,750	2,700	2,650	2,610
15 / 59	3,490	3,210	2,960	2,880	2,810	2,750	2,700	2,660
20 / 68	3,670	3,380	3,100	2,850	2,770	2,710	2,650	2,610
25 / 77	4,050	3,620	3,320	3,040	2,730	2,630	2,570	2,520
30 / 86	4,540	4,050	3,580	3,260	2,920	2,610	2,480	2,430
35 / 95	5,060	4,540	4,050	3,580	3,130	2,790	2,490	2,350
40 / 104	5,670	5,120	4,580	4,040	3,450	3,000	2,670	2,380
45 / 113	—	—	5,250	4,690	3,990	3,330	2,880	2,560
50 / 122	—	—	—	—	4,660	3,940	3,230	2,770
Climb Wght Temp Limits °C/°F	40/104	43/109	46/115	49/120	50/122	50/122	50/122	50/122
Field Length at Temp Limits (ft)	5,670	5,540	5,390	5,250	4,660	3,940	3,230	2,770

Elevation = 3,000 Feet								
	Takeoff Weight (lb)							
Ambient Temp °C / °F	10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	3,300	3,040	2,810	2,700	2,640	2,580	2,540	2,510
0 / 32	3,430	3,160	2,910	2,820	2,750	2,690	2,650	2,610
10 / 50	3,570	3,280	3,020	2,940	2,870	2,810	2,760	2,720
15 / 59	3,650	3,350	3,080	2,990	2,920	2,850	2,800	2,760
20 / 68	3,940	3,600	3,310	3,030	2,820	2,750	2,690	2,640
25 / 77	4,460	3,970	3,560	3,260	2,910	2,650	2,590	2,540
30 / 86	5,030	4,500	4,000	3,530	3,140	2,800	2,510	2,440
35 / 95	5,630	5,060	4,530	4,020	3,430	3,020	2,680	2,390
40 / 104	—	—	5,160	4,590	3,890	3,290	2,880	2,560
45 / 113	—	—	—	5,270	4,540	3,820	3,150	2,760
Climb Wght Temp Limits °C/°F	36/97	39/102	43/109	45/113	47/117	47/117	47/117	47/117
Field Length at Temp Limits (ft)	5,750	5,600	5,580	5,270	4,810	4,080	3,350	2,850

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 4,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	3,440	3,170	2,920	2,810	2,740	2,680	2,640	2,600
0 / 32	3,580	3,290	3,030	2,940	2,860	2,800	2,750	2,710
10 / 50	3,720	3,420	3,140	3,070	2,990	2,920	2,860	2,820
15 / 59	3,890	3,570	3,280	3,050	2,970	2,900	2,840	2,790
20 / 68	4,350	3,860	3,540	3,240	2,900	2,780	2,720	2,660
25 / 77	4,950	4,420	3,910	3,510	3,130	2,800	2,610	2,540
30 / 86	5,610	5,030	4,490	3,980	3,400	3,030	2,690	2,450
35 / 95	—	5,670	5,090	4,520	3,860	3,260	2,900	2,570
40 / 104	—	—	—	5,180	4,440	3,710	3,110	2,760
45 / 113	—	—	—	—	5,120	4,360	3,610	2,980
Climb Wght Temp Limits °C/°F	32/90	36/97	39/102	42/108	45/113	45/113	45/113	45/113
Field Length at Temp Limits (ft)	5,890	5,810	5,640	5,460	5,120	4,360	3,610	2,980

Elevation = 5,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	3,590	3,300	3,040	2,930	2,850	2,790	2,740	2,700
0 / 32	3,740	3,430	3,150	3,060	2,980	2,910	2,860	2,810
5 / 41	3,810	3,500	3,210	3,130	3,050	2,980	2,920	2,870
10 / 50	3,950	3,620	3,320	3,150	3,060	2,990	2,930	2,880
15 / 59	4,340	3,900	3,570	3,270	2,960	2,880	2,810	2,760
20 / 68	4,930	4,390	3,880	3,530	3,150	2,810	2,700	2,640
25 / 77	5,580	4,990	4,440	3,920	3,410	3,030	2,700	2,530
30 / 86	—	5,650	5,050	4,500	3,850	3,290	2,920	2,590
35 / 95	—	—	5,710	5,110	4,360	3,670	3,130	2,770
40 / 104	—	—	—	—	5,020	4,260	3,500	2,980
Climb Wght Temp Limits °C/°F	29/84	32/90	35/95	39/102	42/108	42/108	42/108	42/108
Field Length at Temp Limits (ft)	6,150	5,900	5,710	5,650	5,290	4,520	3,750	3,080

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 6,000 Feet								
	Takeoff Weight (lb)							
Ambient Temp °C / °F	10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	3,750	3,440	3,160	3,050	2,980	2,910	2,850	2,800
0 / 32	3,900	3,580	3,280	3,200	3,110	3,040	2,980	2,930
5 / 41	4,030	3,690	3,380	3,230	3,140	3,070	3,000	2,950
10 / 50	4,330	3,930	3,600	3,290	3,070	2,990	2,920	2,860
15 / 59	4,910	4,360	3,880	3,550	3,160	2,880	2,810	2,740
20 / 68	5,550	4,940	4,390	3,870	3,410	3,040	2,700	2,630
25 / 77	6,240	5,580	4,980	4,420	3,770	3,290	2,920	2,580
30 / 86	—	—	5,620	5,020	4,290	3,640	3,150	2,780
35 / 95	—	—	—	5,680	4,900	4,140	3,450	2,980
40 / 104	—	—	—	—	5,590	4,790	4,000	3,250
Climb Wght Temp Limits °C/°F	25/77	28/82	32/90	35/95	40/104	40/104	40/104	40/104
Field Length at Temp Limits (ft)	6,240	6,000	5,900	5,690	5,590	4,970	4,000	3,250

Elevation = 7,000 Feet								
	Takeoff Weight (lb)							
Ambient Temp °C / °F	10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-20 / -4	3,760	3,450	3,170	3,040	2,960	2,890	2,830	2,790
-10 / 14	3,920	3,600	3,300	3,190	3,100	3,030	2,960	2,910
0 / 32	4,110	3,760	3,450	3,320	3,230	3,150	3,080	3,020
5 / 41	4,350	3,980	3,640	3,330	3,170	3,090	3,010	2,950
10 / 50	4,900	4,340	3,910	3,570	3,190	2,990	2,910	2,840
15 / 59	5,520	4,910	4,340	3,850	3,430	3,050	2,810	2,740
20 / 68	6,190	5,520	4,920	4,350	3,700	3,290	2,920	2,640
25 / 77	—	6,200	5,540	4,930	4,230	3,580	3,150	2,770
30 / 86	—	—	—	5,560	4,780	4,040	3,390	2,980
35 / 95	—	—	—	—	5,450	4,650	3,850	3,200
Climb Wght Temp Limits °C/°F	22/72	25/77	28/82	32/90	36/97	37/99	37/99	37/99
Field Length at Temp Limits (ft)	6,480	6,210	5,920	5,840	5,590	4,910	4,110	3,350

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 8,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-20 / -4	3,910	3,590	3,300	3,190	3,100	3,030	2,960	2,910
-10 / 14	4,090	3,740	3,430	3,350	3,250	3,170	3,100	3,050
0 / 32	4,450	4,070	3,720	3,400	3,250	3,170	3,090	3,020
5 / 41	4,910	4,340	3,950	3,610	3,220	3,100	3,010	2,950
10 / 50	5,500	4,880	4,300	3,870	3,440	3,060	2,920	2,850
15 / 59	6,140	5,460	4,840	4,270	3,700	3,290	2,910	2,750
20 / 68	—	6,100	5,430	4,810	4,110	3,540	3,130	2,760
25 / 77	—	—	6,050	5,390	4,630	3,940	3,370	2,960
30 / 86	—	—	—	—	5,250	4,450	3,730	3,180
35 / 95	—	—	—	—	—	5,140	4,310	3,520
Climb Wght Temp Limits °C/°F	18/64	21/70	25/77	29/84	33/91	35/95	35/95	35/95
Field Length at Temp Limits (ft)	6,550	6,230	6,060	5,920	5,680	5,140	4,310	3,520

Elevation = 9,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-20 / -4	4,110	3,760	3,450	3,320	3,230	3,150	3,080	3,020
-10 / 14	4,390	4,010	3,670	3,410	3,310	3,220	3,140	3,080
-5 / 23	4,630	4,200	3,840	3,510	3,300	3,210	3,120	3,060
0 / 32	5,000	4,420	4,030	3,670	3,280	3,180	3,100	3,020
5 / 41	5,500	4,860	4,280	3,900	3,470	3,120	3,030	2,960
10 / 50	6,120	5,430	4,800	4,220	3,710	3,300	2,950	2,870
15 / 59	6,790	6,040	5,360	4,740	4,020	3,540	3,130	2,790
20 / 68	—	—	5,970	5,300	4,540	3,840	3,360	2,950
25 / 77	—	—	—	5,890	5,070	4,330	3,640	3,170
30 / 86	—	—	—	—	5,780	4,940	4,120	3,420
Climb Wght Temp Limits °C/°F	16/61	19/66	22/72	26/79	30/86	32/90	32/90	32/90
Field Length at Temp Limits (ft)	6,940	6,570	6,230	6,030	5,790	5,230	4,390	3,610

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 10,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-20 / -4	4,390	4,020	3,670	3,480	3,370	3,280	3,200	3,140
-10 / 14	4,910	4,400	4,010	3,660	3,360	3,270	3,180	3,110
-5 / 23	5,270	4,650	4,200	3,830	3,410	3,250	3,160	3,090
0 / 32	5,660	5,010	4,420	4,020	3,570	3,230	3,140	3,060
5 / 41	6,240	5,520	4,880	4,280	3,800	3,370	3,070	2,990
10 / 50	6,890	6,110	5,410	4,770	4,060	3,600	3,180	2,910
15 / 59	—	6,750	5,990	5,300	4,520	3,850	3,400	2,990
20 / 68	—	—	—	5,880	5,040	4,280	3,640	3,190
25 / 77	—	—	—	—	5,640	4,800	4,060	3,430
30 / 86	—	—	—	—	—	5,540	4,660	3,830
Climb Wght Temp Limits °C/°F	12/54	16/19	19/66	23/73	27/81	30/86	30/86	30/86
Field Length at Temp Limits (ft)	7,178	6,890	6,494	6,258	5,956	5,540	4,660	3,830

Elevation = 11,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	4,480	4,100	3,870	3,530	3,430	3,330	3,250	3,190
-20 / -4	4,920	4,440	4,060	3,700	3,460	3,360	3,280	3,200
-10 / 14	5,640	4,980	4,450	4,050	3,600	3,350	3,260	3,170
-5 / 23	6,030	5,330	4,690	4,240	3,760	3,340	3,240	3,160
0 / 32	6,510	5,760	5,080	4,460	3,950	3,500	3,210	3,120
5 / 41	7,140	6,320	5,590	4,920	4,210	3,720	3,290	3,060
10 / 50	—	6,940	6,140	5,430	4,610	3,960	3,500	3,070
15 / 59	—	—	6,740	5,970	5,100	4,310	3,730	3,270
20 / 68	—	—	—	6,580	5,640	4,810	4,050	3,490
25 / 77	—	—	—	—	6,350	5,440	4,580	3,810
Climb Wght Temp Limits °C/°F	9/48	13/55	16/61	20/68	25/77	28/82	28/82	28/82
Field Length at Temp Limits (ft)	7,700	7,342	7,000	6,580	6,350	5,930	5,010	4,120

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 12,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	4,900	4,470	4,080	3,730	3,570	3,470	3,380	3,300
-20 / -4	5,660	4,990	4,490	4,090	3,640	3,450	3,350	3,270
-10 / 14	6,450	5,700	5,020	4,480	3,970	3,520	3,340	3,250
-5 / 23	6,900	6,100	5,370	4,710	4,150	3,680	3,330	3,240
0 / 32	7,470	6,610	5,830	5,130	4,380	3,880	3,420	3,200
5 / 41	8,150	7,200	6,360	5,610	4,760	4,110	3,620	3,180
10 / 50	—	—	6,920	6,120	5,210	4,400	3,840	3,360
15 / 59	—	—	—	6,670	5,700	4,840	4,080	3,570
20 / 68	—	—	—	—	6,330	5,410	4,570	3,830
25 / 77	—	—	—	—	—	6,200	5,240	4,330
Climb Wght Temp Limits °C/°F	5/41	9/48	13/55	17/63	22/72	25/77	25/77	25/77
Field Length at Temp Limits (ft)	8,150	7,712	7,292	6,945	6,643	6,200	5,240	4,330

Elevation = 13,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	5,640	4,970	4,520	4,120	3,660	3,550	3,450	3,370
-20 / -4	6,480	5,720	5,030	4,520	4,010	3,560	3,440	3,340
-15 / 5	6,920	6,120	5,390	4,740	4,200	3,720	3,430	3,330
-10 / 14	7,380	6,520	5,750	5,040	4,390	3,880	3,430	3,330
-5 / 23	7,890	6,960	6,140	5,400	4,590	4,060	3,580	3,320
0 / 32	8,600	7,570	6,680	5,880	4,980	4,290	3,780	3,320
5 / 41	—	8,220	7,250	6,400	5,440	4,590	4,000	3,500
10 / 50	—	—	—	6,950	5,930	5,030	4,240	3,710
15 / 59	—	—	—	—	6,480	5,520	4,650	3,940
20 / 68	—	—	—	—	—	6,210	5,250	4,380
Climb Wght Temp Limits °C/°F	0/32	5/41	9/48	14/57	18/64	23/73	23/73	23/73
Field Length at Temp Limits (ft)	8,600	8,220	7,746	7,446	6,924	6,750	5,740	4,740

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 15°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 14,000 Feet								
Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	6,480	5,720	5,020	4,560	4,040	3,640	3,530	3,440
-20 / -4	7,420	6,550	5,770	5,060	4,430	3,920	3,530	3,420
-15 / 5	7,930	6,990	6,170	5,420	4,640	4,100	3,620	3,420
-10 / 14	8,450	7,450	6,570	5,770	4,870	4,280	3,780	3,420
-5 / 23	9,290	7,990	7,040	6,200	5,250	4,500	3,960	3,470
0 / 32	—	8,660	7,630	6,720	5,710	4,810	4,180	3,660
5 / 41	—	—	8,260	7,280	6,200	5,250	4,420	3,860
10 / 50	—	—	—	7,880	6,720	5,720	4,810	4,090
15 / 59	—	—	—	—	7,390	6,310	5,340	4,440
20 / 68	—	—	—	—	—	—	6,090	5,040
Climb Wght Temp Limits °C/°F	-5/23	0/32	5/41	10/50	15/59	19/66	20/68	20/68
Field Length at Temp Limits (ft)	9,290	8,660	8,260	7,880	7,390	6,982	6,090	5,040

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = Sea Level

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
0 / 32	3,710	3,400	3,120	2,860	2,570	2,460	2,390	2,340
10 / 50	3,860	3,540	3,240	2,960	2,660	2,560	2,490	2,440
15 / 59	3,940	3,600	3,300	3,020	2,710	2,610	2,550	2,480
20 / 68	4,020	3,670	3,360	3,070	2,750	2,670	2,600	2,530
25 / 77	4,270	3,890	3,550	3,240	2,890	2,650	2,550	2,480
30 / 86	4,760	4,160	3,780	3,450	3,070	2,730	2,540	2,430
35 / 95	5,350	4,680	4,060	3,680	3,270	2,900	2,580	2,430
40 / 104	5,990	5,260	4,600	3,990	3,490	3,090	2,740	2,440
45 / 113	6,750	5,970	5,290	4,610	3,830	3,320	2,940	2,600
50 / 122	7,600	6,870	6,160	5,460	4,580	3,700	3,170	2,810
Climb Wght Temp Limits °C/°F	54/129	54/129	54/129	54/129	54/129	54/129	54/129	54/129
Field Length at Temp Limits (ft)	8,390	7,650	6,910	6,180	5,280	4,380	3,480	2,990

Elevation = 1,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
0 / 32	3,890	3,560	3,260	2,980	2,670	2,550	2,480	2,420
10 / 50	4,050	3,700	3,380	3,090	2,760	2,650	2,580	2,520
15 / 59	4,130	3,770	3,440	3,150	2,810	2,710	2,640	2,570
20 / 68	4,270	3,900	3,550	3,240	2,890	2,730	2,660	2,590
25 / 77	4,660	4,170	3,790	3,460	3,070	2,740	2,610	2,520
30 / 86	5,280	4,600	4,060	3,690	3,280	2,910	2,610	2,490
35 / 95	5,960	5,220	4,550	3,960	3,500	3,110	2,750	2,490
40 / 104	6,710	5,900	5,170	4,510	3,760	3,330	2,940	2,590
45 / 113	7,550	6,670	5,960	5,250	4,370	3,590	3,170	2,790
50 / 122	8,500	7,630	6,890	6,150	5,230	4,330	3,430	3,020
Climb Wght Temp Limits °C/°F	50/122	52/126	52/126	52/126	52/126	52/126	52/126	52/126
Field Length at Temp Limits (ft)	8,500	8,040	7,280	6,530	5,600	4,680	3,760	3,120

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 2,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
0 / 32	4,060	3,710	3,390	3,100	2,770	2,650	2,580	2,520
10 / 50	4,230	3,860	3,520	3,210	2,870	2,770	2,690	2,620
15 / 59	4,320	3,930	3,590	3,270	2,920	2,830	2,750	2,680
20 / 68	4,570	4,150	3,780	3,440	3,060	2,800	2,710	2,640
25 / 77	4,170	4,490	4,060	3,690	3,280	2,910	2,680	2,560
30 / 86	5,910	5,160	4,480	3,970	3,520	3,120	2,760	2,550
35 / 95	6,710	5,880	5,140	4,470	3,790	3,350	2,960	2,610
40 / 104	7,560	6,640	5,830	5,110	4,270	3,600	3,180	2,790
45 / 113	8,500	7,470	6,720	5,980	5,060	4,140	3,430	3,010
50 / 122	—	8,480	7,690	6,920	5,960	5,010	4,070	3,270
Climb Wght Temp Limits °C/°F	47/117	50/122	50/122	50/122	50/122	50/122	50/122	50/122
Field Length at Temp Limits (ft)	8,290	8,480	7,690	6,920	5,960	5,010	4,070	3,270

Elevation = 3,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	4,060	3,710	3,390	3,100	2,770	2,650	2,570	2,510
0 / 32	4,240	3,870	3,530	3,220	2,870	2,770	2,690	2,620
10 / 50	4,420	4,020	3,670	3,340	2,980	2,890	2,810	2,730
15 / 59	4,530	4,120	3,750	3,420	3,040	2,940	2,860	2,780
20 / 68	5,000	4,450	4,040	3,680	3,260	2,900	2,760	2,680
25 / 77	5,790	5,040	4,380	3,970	3,510	3,110	2,760	2,620
30 / 86	6,660	5,820	5,070	4,380	3,800	3,360	2,970	2,610
35 / 95	7,600	6,660	5,830	5,080	4,240	3,630	3,200	2,810
40 / 104	8,540	7,470	6,590	5,850	4,920	4,030	3,440	3,020
45 / 113	—	8,380	7,530	6,750	5,780	4,830	3,880	3,250
Climb Wght Temp Limits °C/°F	44/111	46/115	47/117	47/117	47/117	47/117	47/117	47/117
Field Length at Temp Limits (ft)	9,390	8,580	7,920	7,130	6,150	5,180	4,220	3,370

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 4,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	4,250	3,870	3,540	3,230	2,880	2,760	2,680	2,610
0 / 32	4,440	4,040	3,680	3,350	2,990	2,890	2,800	2,730
10 / 50	4,630	4,210	3,830	3,480	3,120	3,020	2,930	2,850
15 / 59	4,870	4,420	4,010	3,650	3,240	3,000	2,900	2,820
20 / 68	5,610	4,860	4,360	3,950	3,500	3,100	2,830	2,700
25 / 77	6,540	5,690	4,940	4,300	3,790	3,350	2,960	2,690
30 / 86	7,580	6,610	5,770	5,020	4,160	3,640	3,210	2,820
35 / 95	8,610	7,510	6,580	5,750	4,830	4,000	3,470	3,040
40 / 104	9,690	8,420	7,400	6,620	5,650	4,690	3,780	3,260
45 / 113	—	—	8,380	7,560	6,550	5,550	4,560	3,560
Climb Wght Temp Limits °C/°F	40/104	43/109	45/113	45/113	45/113	45/113	45/113	45/113
Field Length at Temp Limits (ft)	9,690	9,020	8,380	7,560	6,550	5,550	4,560	3,560

Elevation = 5,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	4,450	4,050	3,690	3,370	3,000	2,870	2,790	2,720
0 / 32	4,650	4,230	3,840	3,500	3,110	3,010	2,920	2,840
5 / 41	4,750	4,310	3,920	3,570	3,190	3,080	2,990	2,900
10 / 50	4,940	4,480	4,070	3,690	3,280	3,100	3,000	2,910
15 / 59	5,590	4,860	4,400	3,980	3,520	3,120	2,900	2,800
20 / 68	6,500	5,640	4,880	4,320	3,810	3,370	2,970	2,750
25 / 77	7,530	6,550	5,700	4,930	4,150	3,650	3,220	2,820
30 / 86	8,700	7,570	6,610	5,760	4,820	3,980	3,500	3,060
35 / 95	9,790	8,480	7,400	6,510	5,530	4,560	3,760	3,280
40 / 104	—	9,500	8,270	7,420	6,410	5,400	4,410	3,530
Climb Wght Temp Limits °C/°F	36/97	40/104	42/108	42/108	42/108	42/108	42/108	42/108
Field Length at Temp Limits (ft)	10,030	9,480	8,650	7,810	6,770	5,750	4,740	3,720

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 6,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-10 / 14	4,670	4,240	3,860	3,510	3,120	3,000	2,910	2,830
0 / 32	4,880	4,420	4,020	3,650	3,260	3,150	3,050	2,960
5 / 41	5,050	4,570	4,150	3,770	3,340	3,180	3,080	2,990
10 / 50	5,560	4,910	4,440	4,020	3,550	3,140	3,000	2,910
15 / 59	6,460	5,590	4,820	4,350	3,830	3,380	2,990	2,830
20 / 68	7,470	6,480	5,620	4,840	4,160	3,660	3,220	2,830
25 / 77	8,620	7,480	6,510	5,650	4,700	3,980	3,490	3,060
30 / 86	9,860	8,520	7,410	6,460	5,420	4,510	3,780	3,300
35 / 95	—	9,550	8,280	7,270	6,250	5,240	4,230	3,550
40 / 104	—	—		8,230	7,160	6,110	5,070	4,020
Climb Wght Temp Limits °C/°F	33/91	36/97	39/102	40/104	40/104	40/104	40/104	40/104
Field Length at Temp Limits (ft)	10,600	9,780	9,050	8,230	7,160	6,110	5,070	4,020

Elevation = 7,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-20 / -4	4,680	4,250	3,870	3,520	3,130	2,990	2,900	2,820
-10 / 14	4,900	4,450	4,040	3,670	3,250	3,140	3,040	2,950
0 / 32	5,160	4,670	4,230	3,840	3,400	3,270	3,170	3,070
5 / 41	5,580	4,980	4,500	4,070	3,590	3,210	3,110	3,010
10 / 50	6,430	5,550	4,860	4,380	3,860	3,410	3,040	2,910
15 / 59	7,410	6,420	5,540	4,760	4,170	3,670	3,230	2,890
20 / 68	8,530	7,390	6,400	5,540	4,580	3,980	3,490	3,050
25 / 77	9,830	8,480	7,360	6,390	5,340	4,410	3,790	3,300
30 / 86	—	9,570	8,270	7,190	6,070	5,050	4,150	3,550
35 / 95	—	—	9,250	8,030	6,960	5,910	4,860	3,850
Climb Wght Temp Limits °C/°F	29/84	33/91	35/95	37/99	37/99	37/99	37/99	37/99
Field Length at Temp Limits (ft)	10,970	10,260	9,250	8,430	7,330	6,260	5,200	4,130

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 8,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-20 / 4	4,890	4,440	4,030	3,660	3,250	3,140	3,040	2,950
-10 / 14	5,130	4,640	4,210	3,820	3,420	3,300	3,190	3,090
0 / 32	5,700	5,090	4,590	4,150	3,670	3,300	3,190	3,090
5 / 41	6,430	5,540	4,920	4,430	3,900	3,440	3,120	3,010
10 / 50	7,360	6,360	5,480	4,790	4,200	3,690	3,250	2,970
15 / 59	8,410	7,280	6,290	5,420	4,530	3,790	3,490	3,050
20 / 68	9,620	8,300	7,180	6,210	5,150	4,300	3,760	3,280
25 / 77	11,150	9,460	8,160	7,070	5,910	4,900	4,070	3,540
30 / 86	—	—	9,170	7,930	6,690	5,630	4,600	3,810
35 / 95	—	—	—	8,890	7,650	6,550	5,460	4,370
Climb Wght Temp Limits °C/°F	26/79	29/84	33/91	35/95	35/95	35/95	35/95	35/95
Field Length at Temp Limits (ft)	11,540	10,430	9,840	8,890	7,650	6,550	5,460	4,370

Elevation = 9,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-20 / -4	5,160	4,670	4,230	3,840	3,400	3,280	3,170	3,070
-10 / 14	5,560	5,010	4,530	4,090	3,620	3,360	3,250	3,140
-5 / 23	5,990	5,280	4,760	4,290	3,780	3,350	3,230	3,130
0 / 32	6,550	5,630	5,020	4,520	3,970	3,500	3,210	3,100
5 / 41	7,340	6,330	5,430	4,820	4,230	3,720	3,270	3,040
10 / 50	8,350	7,210	6,210	5,330	4,550	3,990	3,500	3,060
15 / 59	9,510	8,200	7,080	6,100	5,030	4,300	3,760	3,280
20 / 68	10,980	9,330	8,040	6,940	5,770	4,750	4,050	3,530
25 / 77	—	10,600	9,090	7,840	6,540	5,440	4,470	3,800
30 / 86	—	—	10,260	8,810	7,380	6,280	5,190	4,160
Climb Wght Temp Limits °C/°F	23/73	26/79	30/86	32/90	32/90	32/90	32/90	32/90
Field Length at Temp Limits (ft)	11,940	10,880	10,260	9,240	7,790	6,670	5,560	4,440

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 10,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	5,240	4,740	4,290	3,900	3,450	3,270	3,170	3,070
-20 / -4	5,550	5,010	4,530	4,100	3,620	3,430	3,310	3,200
-10 / 14	6,390	5,550	4,990	4,500	3,960	3,490	3,300	3,190
0 / 32	7,580	6,520	5,590	4,980	4,360	3,830	3,360	3,150
5 / 41	8,510	7,340	6,310	5,400	4,660	4,080	3,580	3,150
10 / 50	9,620	8,290	7,130	6,130	5,030	4,370	3,820	3,330
15 / 59	11,000	9,360	8,050	6,930	5,730	4,700	4,100	3,570
20 / 68	—	10,600	9,080	7,810	6,490	5,360	4,410	3,830
25 / 77	—	—	10,280	8,810	7,320	6,100	5,030	4,130
30 / 86	—	—	11,700	9,940	8,250	7,060	5,910	4,750
Climb/BE Temp Limits °C/°F	15/59	20/68	27/81	30/86	30/86	30/86	30/86	30/86
Field Length at Temp Limits (ft)	11,000	10,600	10,848	9,940	8,250	7,060	5,910	3,830

Elevation = 11,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	5,660	5,110	4,620	4,180	3,690	3,480	3,360	3,250
-20 / -4	6,380	5,590	5,040	4,540	4,000	3,530	3,400	3,280
-10 / 14	7,490	6,440	5,570	5,000	4,380	3,850	3,390	3,270
-5 / 23	8,120	6,990	5,990	5,280	4,600	4,030	3,540	3,250
0 / 32	8,900	7,670	6,580	5,620	4,860	4,250	3,720	3,280
5 / 41	9,980	8,580	7,380	6,330	5,200	4,530	3,960	3,450
10 / 50	11,310	9,610	8,250	7,090	5,840	4,850	4,220	3,670
15 / 59	—	10,780	9,230	7,920	6,550	5,390	4,520	3,920
20 / 68	—	—	10,390	8,890	7,360	6,090	5,000	4,200
25 / 77	—	—	11,850	10,070	8,320	6,920	5,740	4,660
Climb/BE Temp Limits °C/°F	10/50	15/59	24/75	27/81	28/82	28/82	28/82	28/82
Field Length at Temp Limits (ft)	11,310	10,780	11,558	10,597	8,940	7,560	6,350	4,120

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 12,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	6,310	5,610	5,080	4,570	4,020	3,630	3,500	3,390
-20 / -4	7,480	6,430	5,630	5,050	4,430	3,890	3,480	3,360
-10 / 14	8,750	7,530	6,460	5,580	4,870	4,260	3,740	3,370
-5 / 23	9,490	8,160	7,000	5,980	5,110	4,460	3,900	3,410
0 / 32	10,460	8,990	7,720	6,610	5,430	4,720	4,120	3,590
5 / 41	11,810	9,980	8,580	7,330	6,020	5,030	4,380	3,800
10 / 50	—	11,100	9,490	8,130	6,700	5,490	4,650	4,030
15 / 59	—	—	10,540	9,000	7,420	6,120	4,980	4,290
20 / 68	—	—	—	10,190	8,380	6,940	5,710	4,630
25 / 77	—	—	—	—	9,520	7,900	6,640	5,380
Climb/BE Temp Limits °C/°F	5/41	10/50	15/59	24/75	25/77	25/77	25/77	25/77
Field Length at Temp Limits (ft)	11,810	11,100	11,420	11,350	9,520	7,900	6,640	5,380

Elevation = 13,000 Feet

Ambient Temp °C / °F	Takeoff Weight (lb) 10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	7,430	6,380	5,660	5,080	4,460	3,920	3,590	3,460
-20 / -4	8,750	7,530	6,450	5,640	4,920	4,310	3,770	3,450
-15 / 5	9,470	8,150	6,990	5,960	5,160	4,510	3,950	3,490
-10 / 14	10,230	8,790	7,540	6,440	5,420	4,720	4,130	3,590
-5 / 23	11,110	9,520	8,160	6,980	5,700	4,950	4,320	3,950
0 / 32	—	10,540	9,020	7,720	6,330	5,270	4,580	3,970
5 / 41	—	11,730	9,980	8,530	7,010	5,740	4,860	4,200
10 / 50	—	—	11,050	9,430	7,750	6,370	5,170	4,460
15 / 59	—	—	12,380	10,470	8,590	7,080	5,800	4,760
20 / 68	—	—	—	11,950	9,740	8,040	6,640	5,410
Climb/BE Temp Limits °C/°F	-5/23	5/41	15/59	22/72	23/73	23/73	23/73	23/73
Field Length at Temp Limits (ft)	11,110	11,730	12,380	12,637	10,510	8,670	7,290	5,960

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH – FEET; FLAPS - 0°

(Over 35 Foot Screen Height)

Dry Runway, Zero Wind, Anti-Ice Off, Cabin Bleed Air On

Elevation = 14,000 Feet								
	Takeoff Weight (lb)							
Ambient Temp °C / °F	10,700	10,300	9,900	9,500	9,000	8,500	8,000	7,500
-30 / -22	8,710	7,490	6,410	5,670	4,950	4,340	3,800	3,550
-20 / -4	10,250	8,810	7,550	6,450	5,480	4,770	4,170	3,630
-15 / 5	11,090	9,520	8,160	6,970	5,760	5,010	4,360	3,790
-10 / 14	12,130	10,270	8,790	7,520	6,140	5,250	4,560	3,960
-5 / 23	—	11,190	9,570	8,170	6,690	5,530	4,800	4,160
0 / 32	—	—	10,550	9,000	7,380	6,030	5,090	4,390
5 / 41	—	—	11,650	9,920	8,130	6,670	5,410	4,660
10 / 50	—	—	—	11,940	8,940	7,350	6,000	4,940
15 / 59	—	—	—	12,300	10,000	8,220	6,760	5,480
20 / 68	—	—	—	—	11,350	9,310	7,740	6,360
Climb/BE Temp Limits °C/°F	-10/14	-5/23	5/41	15/59	20/68	20/68	20/68	20/68
Field Length at Temp Limits (ft)	12,130	11,190	11,650	12,300	11,350	9,310	7,740	6,360

CLIMB PERFORMANCE

CRUISE CLIMB

ISA, Zero Wind, Anti-Ice Off

Time, Fuel and Distance To Climb *

Pressure Altitude (ft)		Takeoff Weight (lb) 10,700	10,000	9,000	8,000	7,000
15,000	Min	5	4	4	3	3
	Lb	138	128	113	99	86
	NM	19	17	15	13	11
21,000	Min	7	7	6	5	4
	Lb	198	182	161	141	121
	NM	30	28	25	21	18
25,000	Min	9	8	7	6	6
	Lb	242	222	196	171	147
	NM	41	38	33	29	25
27,000	Min	10	9	8	7	6
	Lb	263	242	213	185	160
	NM	47	43	38	33	28
29,000	Min	11	10	9	8	7
	Lb	283	260	229	199	171
	NM	53	48	42	37	31
31,000	Min	13	12	10	9	8
	Lb	304	279	244	213	183
	NM	59	54	47	41	35
33,000	Min	14	13	11	10	8
	Lb	327	298	261	227	194
	NM	67	61	53	46	39
35,000	Min	16	14	12	11	9
	Lb	352	320	279	241	206
	NM	76	69	59	51	43
37,000	Min	18	16	14	12	10
	Lb	375	340	295	254	217
	NM	86	77	66	56	48
39,000	Min	20	18	15	13	11
	Lb	401	361	311	267	227
	NM	97	86	73	62	52
41,000	Min	24	20	17	14	12
	Lb	437	388	330	281	238
	NM	113	98	82	68	57

* Based on the climb starting from sea level.

CRUISE PERFORMANCE

HIGH SPEED CRUISE *

ISA, Anti-Ice Off

Cruise Speed & Fuel Flow							
Pressure Altitude (ft)		Cruise Weight (lb) 10,500	10,000	9,500	9,000	8,000	7,000
5,000	KTAS	279	279	279	279	279	279
	Lb/Hr	1,173	1,168	1,163	1,158	1,148	1,140
10,000	KTAS	300	300	300	300	300	300
	Lb/Hr	1,143	1,137	1,132	1,127	1,117	1,109
15,000	KTAS	323	323	323	323	323	323
	Lb/Hr	1,134	1,128	1,122	1,117	1,108	1,099
17,000	KTAS	333	333	333	333	333	333
	Lb/Hr	1,131	1,125	1,120	1,114	1,105	1,096
19,000	KTAS	344	344	344	344	344	344
	Lb/Hr	1,124	1,118	1,113	1,108	1,099	1,091
21,000	KTAS	354	354	354	354	354	354
	Lb/Hr	1,121	1,115	1,110	1,105	1,096	1,088
23,000	KTAS	366	366	366	366	366	366
	Lb/Hr	1,126	1,120	1,114	1,108	1,098	1,089
25,000	KTAS	377	377	377	377	377	377
	Lb/Hr	1,134	1,128	1,122	1,116	1,105	1,096
27,000	KTAS	389	389	389	389	389	389
	Lb/Hr	1,143	1,137	1,131	1,125	1,114	1,105
29,000	KTAS	400	401	402	402	402	402
	Lb/Hr	1,139	1,139	1,139	1,133	1,123	1,114
31,000	KTAS	401	402	403	404	406	408
	Lb/Hr	1,069	1,070	1,071	1,072	1,075	1,077
33,000	KTAS	400	402	403	404	406	407
	Lb/Hr	995	996	997	998	1,001	995
35,000	KTAS	398	399	401	402	403	403
	Lb/Hr	915	917	920	922	917	906
37,000	KTAS	392	394	396	398	401	401
	Lb/Hr	824	827	830	832	837	828
39,000	KTAS	384	389	392	395	398	401
	Lb/Hr	742	748	752	755	760	763
41,000	KTAS	372	379	385	390	396	400
	Lb/Hr	663	671	678	684	691	696

* Maximum cruise thrust setting.

CRUISE PERFORMANCE

LONG RANGE CRUISE *

ISA, Anti-Ice Off

Cruise Speed & Fuel Flow							
Pressure Altitude (ft)		Cruise Weight (lb) 10,500	10,000	9,500	9,000	8,000	7,000
5,000	KTAS	197	193	189	185	177	168
	Lb/Hr	709	681	654	627	573	515
10,000	KTAS	212	206	202	197	188	179
	Lb/Hr	688	654	625	596	541	489
15,000	KTAS	234	226	217	213	203	192
	Lb/Hr	681	640	603	576	522	466
17,000	KTAS	241	235	225	219	209	197
	Lb/Hr	671	639	599	569	514	458
19,000	KTAS	248	244	235	225	214	203
	Lb/Hr	659	634	598	558	502	449
21,000	KTAS	255	250	244	234	220	208
	Lb/Hr	647	621	592	554	494	440
23,000	KTAS	264	258	252	243	228	215
	Lb/Hr	642	614	586	551	488	434
25,000	KTAS	269	264	257	251	235	222
	Lb/Hr	627	599	572	544	482	428
27,000	KTAS	279	272	266	261	244	229
	Lb/Hr	620	591	565	540	477	422
29,000	KTAS	285	282	276	269	252	235
	Lb/Hr	607	586	560	532	472	413
31,000	KTAS	286	283	280	277	264	246
	Lb/Hr	584	564	545	523	472	413
33,000	KTAS	298	290	285	282	273	255
	Lb/Hr	585	553	529	510	466	409
35,000	KTAS	310	302	293	284	277	265
	Lb/Hr	586	555	523	493	452	406
37,000	KTAS	318	317	310	300	281	274
	Lb/Hr	580	561	534	501	439	402
39,000	KTAS	323	318	315	311	296	281
	Lb/Hr	569	541	522	499	446	394
41,000	KTAS	336	331	323	318	310	293
	Lb/Hr	575	548	518	493	450	396

* Thrust for maximum range (approximate).

DESCENT PERFORMANCE

HIGH SPEED & NORMAL DESCENT *

ISA, Zero Wind, Anti-Ice Off,
Speed Brakes Retracted, Gear & Flaps Up

Time, Fuel and Distance To Descend *							
		High Speed - 3,000 FPM			Normal - 2,000 FPM		
Pressure Altitude (ft)		------ End of Cruise Weight (lb) ------			------ End of Cruise Weight (lb) ------		
		9,000	8,000	7,000	9,000	8,000	7,000
15,000	Min	5	5	5	8	8	8
	Lb	23	23	24	65	62	60
	NM	23	23	23	35	35	35
21,000	Min	7	7	7	11	11	11
	Lb	35	35	36	93	88	85
	NM	34	34	34	51	51	51
25,000	Min	8	8	8	13	13	13
	Lb	44	43	44	113	107	103
	NM	42	42	42	62	62	62
29,000	Min	10	10	10	15	15	15
	Lb	54	53	53	133	126	121
	NM	50	50	50	75	75	75
31,000	Min	10	10	10	16	16	16
	Lb	59	58	58	144	136	131
	NM	54	54	54	82	82	82
33,000	Min	11	11	11	17	17	17
	Lb	66	64	64	156	147	141
	NM	59	59	59	88	88	88
35,000	Min	12	12	12	18	18	18
	Lb	72	69	69	167	158	150
	NM	63	63	63	95	95	95
37,000	Min	12	12	12	19	19	19
	Lb	78	75	74	178	167	160
	NM	67	67	67	101	101	101
39,000	Min	13	13	13	20	20	20
	Lb	83	80	78	189	177	168
	NM	71	71	71	107	107	107
41,000	Min	14	14	14	21	21	21
	Lb	89	85	83	200	187	177
	NM	76	76	76	114	114	114

* Based on descending to sea level.

RESERVE FUEL

RESERVE FUEL ALLOWANCES

Based on 3 Passengers, ISA, Zero Wind

VFR Fuel Reserves (at 15,000 feet)	
Day (30 minutes)	257 lb
Night (45 minutes)	391 lb
IFR Fuel Reserves (Alternate plus 45 minutes at 15,000 feet)	
100 Nautical Mile Alternate	689 lb
200 Nautical Mile Alternate	907 lb
300 Nautical Mile Alternate	1,076 lb
NBAA IFR Reserves *	
100 Nautical Mile Alternate	627 lb
200 Nautical Mile Alternate	843 lb
300 Nautical Mile Alternate	1,010 lb

*NBAA IFR Reserves are defined as the amount of fuel for the following profile:

- A 5 minute approach at sea level
- Climb to 5,000 feet
- A 5 minute hold at 5,000 feet
- Climb to cruise altitude for the diversion to the alternate airport
- Cruise at long range cruise power
- Descend to sea level
- Land with 30 minutes of holding fuel at 5,000 feet.

HOLDING PERFORMANCE

ISA, Anti-Ice Off, Speed Brakes Retracted, Gear & Flaps Up

Holding Speed (KIAS) **& Fuel Flow** (lb/hr)								
		Pressure Altitude (ft)						
Weight (lb)	Speed	S.L	5,000	10,000	15,000	20,000	25,000	30,000
10,000	160	620	599	579	561	546	529	517
9,000	150	561	540	520	503	488	474	462
8,000	140	504	483	464	448	433	420	409
7,000	130	451	429	411	395	380	368	358

LANDING PERFORMANCE

LANDING DISTANCE - FEET (ACTUAL DISTANCE)**; FLAPS 35°**
(Distance from 50 Feet Above the Runway)
Dry Runway, Zero Wind, Anti-Ice Off

Elevation = Sea Level								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
0 / 32	2,500	2,470	2,440	2,410	2,340	2,280	2,200	2,110
10 / 50	2,560	2,530	2,500	2,460	2,390	2,330	2,250	2,160
15 / 59	2,590	2,560	2,520	2,490	2,420	2,350	2,270	2,180
20 / 68	2,620	2,590	2,560	2,520	2,450	2,380	2,300	2,210
25 / 77	2,660	2,620	2,590	2,550	2,480	2,410	2,330	2,240
30 / 86	2,690	2,650	2,620	2,580	2,510	2,440	2,350	2,260
35 / 95	2,730	2,690	2,650	2,610	2,540	2,470	2,380	2,290
40 / 104	2,770	2,720	2,680	2,650	2,570	2,500	2,410	2,320
45 / 113	2,820	2,750	2,710	2,680	2,600	2,530	2,440	2,340
50 / 122	2,880	2,790	2,740	2,710	2,630	2,560	2,470	2,370
Lndg Wght Temp Limits °C/°F	54/129	54/129	54/129	54/129	54/129	54/129	54/129	54/129
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

Elevation = 1,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
0 / 32	2,560	2,530	2,500	2,460	2,400	2,330	2,250	2,160
10 / 50	2,630	2,590	2,560	2,520	2,450	2,380	2,300	2,210
15 / 59	2,660	2,620	2,590	2,550	2,480	2,410	2,330	2,230
20 / 68	2,690	2,650	2,620	2,580	2,510	2,440	2,350	2,260
25 / 77	2,730	2,690	2,650	2,620	2,540	2,470	2,380	2,290
30 / 86	2,780	2,720	2,680	2,650	2,570	2,500	2,410	2,320
35 / 95	2,830	2,750	2,720	2,680	2,600	2,530	2,440	2,340
40 / 104	2,890	2,800	2,750	2,710	2,630	2,560	2,470	2,370
45 / 113	2,940	2,850	2,780	2,740	2,660	2,590	2,500	2,400
50 / 122	3,000	2,900	2,820	2,770	2,700	2,620	2,530	2,430
Lndg Wght Temp Limits °C/°F	52/126	52/126	52/126	52/126	52/126	52/126	52/126	52/126
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

LANDING PERFORMANCE

LANDING DISTANCE - FEET (ACTUAL DISTANCE)**; FLAPS 35°**
(Distance from 50 Feet Above the Runway)
Dry Runway, Zero Wind, Anti-Ice Of5

Elevation = 2,000 Feet

Ambient Temp °C / °F	Landing Weight (lb) 9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
0 / 32	2,630	2,590	2,560	2,520	2,450	2,390	2,300	2,210
10 / 50	2,690	2,660	2,620	2,580	2,510	2,440	2,350	2,260
15 / 59	2,730	2,690	2,650	2,610	2,540	2,470	2,380	2,290
20 / 68	2,780	2,720	2,680	2,650	2,570	2,500	2,410	2,320
25 / 77	2,840	2,760	2,720	2,680	2,610	2,530	2,440	2,340
30 / 86	2,890	2,810	2,750	2,710	2,640	2,560	2,470	2,370
35 / 95	2,950	2,860	2,780	2,750	2,670	2,590	2,500	2,400
40 / 104	3,010	2,920	2,830	2,780	2,700	2,620	2,530	2,430
45 / 113	3,070	2,970	2,880	2,810	2,730	2,650	2,560	2,460
50 / 122	—	3,030	2,930	2,840	2,760	2,680	2,590	2,480
Lndg Wght Temp Limits °C/°F	49/120	50/122	50/122	50/122	50/122	50/122	50/122	50/122
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

Elevation = 3,000 Feet

Ambient Temp °C / °F	Landing Weight (lb) 9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-5 / 14	2,630	2,590	2,560	2,530	2,460	2,390	2,300	2,210
0 / 32	2,690	2,660	2,620	2,590	2,520	2,450	2,360	2,270
10 / 50	2,790	2,720	2,690	2,650	2,570	2,500	2,410	2,320
15 / 59	2,840	2,760	2,720	2,680	2,610	2,530	2,440	2,340
20 / 68	2,900	2,810	2,750	2,710	2,640	2,560	2,470	2,370
25 / 77	2,960	2,870	2,790	2,750	2,670	2,600	2,500	2,400
30 / 86	3,020	2,920	2,840	2,780	2,700	2,630	2,530	2,430
35 / 95	3,080	2,980	2,890	2,810	2,740	2,660	2,560	2,460
40 / 104	3,140	3,040	2,940	2,860	2,770	2,690	2,590	2,490
45 / 113	3,200	3,100	3,000	2,910	2,800	2,720	2,620	2,520
Lndg Wght Temp Limits °C/°F	45/113	47/117	47/117	47/117	47/117	47/117	47/117	47/117
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

LANDING PERFORMANCE

LANDING DISTANCE - FEET (ACTUAL DISTANCE)**; FLAPS 35°**
(Distance from 50 Feet Above the Runway)
Dry Runway, Zero Wind, Anti-Ice Off

Elevation = 4,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-10 / 14	2,690	2,660	2,620	2,590	2,520	2,450	2,360	2,270
0 / 32	2,790	2,730	2,690	2,650	2,580	2,510	2,420	2,320
10 / 50	2,900	2,820	2,750	2,720	2,640	2,570	2,470	2,370
15 / 59	2,960	2,870	2,790	2,750	2,670	2,600	2,500	2,400
20 / 68	3,020	2,930	2,840	2,780	2,700	2,630	2,530	2,430
25 / 77	3,090	2,990	2,900	2,820	2,740	2,660	2,560	2,460
30 / 86	3,150	3,050	2,950	2,860	2,770	2,690	2,590	2,490
35 / 95	3,220	3,110	3,010	2,920	2,800	2,730	2,630	2,520
40 / 104	3,290	3,170	3,070	2,970	2,840	2,760	2,660	2,550
45 / 113	—	—	3,130	3,030	2,870	2,790	2,690	2,580
Lndg Wght Temp Limits °C/°F	42/108	44/111	45/113	45/113	45/113	45/113	45/113	45/113
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

Elevation = 5,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-10 / 14	2,790	2,730	2,690	2,650	2,580	2,510	2,420	2,320
0 / 32	2,910	2,820	2,760	2,720	2,640	2,570	2,480	2,380
5 / 41	2,970	2,880	2,800	2,750	2,680	2,600	2,510	2,410
10 / 50	3,030	2,930	2,850	2,790	2,710	2,630	2,530	2,430
15 / 59	3,090	2,990	2,900	2,820	2,740	2,660	2,560	2,460
20 / 68	3,160	3,060	2,960	2,870	2,770	2,700	2,600	2,490
25 / 77	3,230	3,120	3,020	2,930	2,810	2,730	2,630	2,520
30 / 86	3,300	3,190	3,080	2,980	2,840	2,760	2,660	2,550
35 / 95	3,370	3,250	3,140	3,040	2,880	2,800	2,690	2,580
40 / 104	—	3,320	3,210	3,100	2,910	2,830	2,720	2,610
Lndg Wght Temp Limits °C/°F	35/95	40/104	42/108	42/108	42/108	42/108	42/108	42/108
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

LANDING PERFORMANCE

LANDING DISTANCE - FEET (ACTUAL DISTANCE)**; FLAPS 35°**
(Distance from 50 Feet Above the Runway)
Dry Runway, Zero Wind, Anti-Ice Off

Elevation = 6,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-10 / 14	2,910	2,830	2,760	2,720	2,650	2,570	2,480	2,380
0 / 32	3,040	2,940	2,850	2,790	2,710	2,630	2,540	2,440
5 / 41	3,100	3,000	2,910	2,820	2,740	2,670	2,570	2,470
10 / 50	3,170	3,060	2,970	2,880	2,780	2,700	2,600	2,490
15 / 59	3,240	3,130	3,030	2,930	2,810	2,730	2,630	2,520
20 / 68	3,310	3,200	3,090	2,990	2,850	2,760	2,660	2,550
25 / 77	3,390	3,270	3,150	3,050	2,880	2,800	2,700	2,590
30 / 86	3,470	3,340	3,220	3,110	2,920	2,830	2,730	2,620
35 / 95	3,550	3,410	3,290	3,170	2,970	2,870	2,760	2,650
40 / 104	—	—	—	3,240	3,020	2,900	2,790	2,680
Lndg Wght Temp Limits °C/°F	35/95	36/97	38/100	40/104	40/104	40/104	40/104	40/104
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

Elevation = 7,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-20 / -4	2,910	2,820	2,760	2,720	2,650	2,570	2,480	2,380
-10 / 14	3,040	2,940	2,860	2,790	2,710	2,640	2,540	2,440
0 / 32	3,180	3,070	2,970	2,880	2,780	2,700	2,600	2,500
5 / 41	3,250	3,140	3,030	2,940	2,820	2,740	2,630	2,530
10 / 50	3,320	3,200	3,100	3,000	2,850	2,770	2,670	2,560
15 / 59	3,400	3,270	3,160	3,060	2,880	2,800	2,700	2,590
20 / 68	3,480	3,350	3,230	3,120	2,920	2,840	2,730	2,620
25 / 77	3,570	3,430	3,300	3,190	2,980	2,870	2,770	2,650
30 / 86	3,650	3,510	3,370	3,250	3,040	2,910	2,800	2,680
35 / 95	—	—	3,450	3,320	3,100	2,940	2,830	2,720
Lndg Wght Temp Limits °C/°F	25/77	32/90	35/95	36/97	37/99	37/99	37/99	37/99
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

LANDING PERFORMANCE

LANDING DISTANCE - FEET (ACTUAL DISTANCE)**; FLAPS 35°**
(Distance from 50 Feet Above the Runway)
Dry Runway, Zero Wind, Anti-Ice Off

Elevation = 8,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-20 / -4	3,040	2,940	2,860	2,790	2,710	2,640	2,540	2,440
-10 / 14	3,180	3,070	2,980	2,890	2,780	2,710	2,610	2,500
0 / 32	3,330	3,210	3,110	3,010	2,860	2,770	2,670	2,560
5 / 41	3,410	3,290	3,170	3,070	2,890	2,810	2,700	2,590
10 / 50	3,490	3,360	3,240	3,130	2,930	2,840	2,740	2,620
15 / 59	3,580	3,440	3,310	3,190	2,990	2,880	2,770	2,660
20 / 68	3,670	3,520	3,390	3,260	3,050	2,910	2,800	2,690
25 / 77	3,770	3,610	3,470	3,340	3,110	2,950	2,840	2,720
30 / 86	—	3,700	3,550	3,410	3,170	2,980	2,870	2,750
35 / 95	—	—	—	—	3,230	3,020	2,910	2790
Lndg Wght Temp Limits °C/°F	15/59	27/81	30/86	33/91	35/95	35/95	35/95	35/95
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

Elevation = 9,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-10 / 14	2,790	2,730	2,690	2,650	2,580	2,510	2,420	2,320
0 / 32	2,910	2,820	2,760	2,720	2,640	2,570	2,480	2,380
5 / 41	2,970	2,880	2,800	2,750	2,680	2,600	2,510	2,410
10 / 50	3,030	2,930	2,850	2,790	2,710	2,630	2,530	2,430
15 / 59	3,090	2,990	2,900	2,820	2,740	2,660	2,560	2,460
20 / 68	3,160	3,060	2,960	2,870	2,770	2,700	2,600	2,490
25 / 77	3,230	3,120	3,020	2,930	2,810	2,730	2,630	2,520
30 / 86	3,300	3,190	3,080	2,980	2,840	2,760	2,660	2,550
35 / 95	3,370	3,250	3,140	3,040	2,880	2,800	2,690	2,580
40 / 104	—	3,320	3,210	3,100	2,910	2,830	2,720	2,610
Lndg Wght Temp Limits °C/°F	5/41	16/61	27/81	30/86	32/90	32/90	32/90	32/90
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

LANDING PERFORMANCE

LANDING DISTANCE - FEET (ACTUAL DISTANCE)**; FLAPS 35°**

(Distance from 50 Feet Above the Runway)

Dry Runway, Zero Wind, Anti-Ice Off

Elevation = 10,000 Feet

Ambient Temp °C / °F	Landing Weight (lb) 9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-30 / -22	3,210	3,100	3,000	2,910	2,810	2,730	2,630	2,530
-20 / -4	3,370	3,250	3,140	3,040	2,890	2,800	2,700	2,590
-10 / 14	—	3,410	3,290	3,180	2,970	2,880	2,770	2,660
0 / 32	—	3,580	3,440	3,320	3,100	2,950	2,840	2,720
5 / 41	—	3,670	3,530	3,390	3,160	2,990	2,880	2,760
10 / 50	—	—	3,610	3,470	3,220	3,020	2,910	2,790
15 / 59	—	—	3,700	3,550	3,290	3,070	2,950	2,820
20 / 68	—	—	3,800	3,640	3,360	3,130	2,980	2,860
25 / 77	—	—	—	3,720	3,430	3,200	3,020	2,900
30 / 86	—	—	—	—	3,510	3,260	3,060	2,930
Lndg Wght Temp Limits °C/°F	-5/23	5/41	17/63	26/79	31/88	31/88	31/88	31/88
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

Elevation = 12,000 Feet

Ambient Temp °C / °F	Landing Weight (lb) 9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-20 / -4	—	3,740	3,590	3,460	3,230	3,080	2,960	2,840
-15 / 5	—	3,840	3,690	3,550	3,300	3,120	3,000	2,880
-10 / 14	—	—	3,780	3,630	3,370	3,160	3,040	2,910
-5 / 23	—	—	3,880	3,720	3,450	3,220	3,080	2,950
0 / 32	—	—	—	3,820	3,520	3,280	3,120	2,990
5 / 41	—	—	—	3,910	3,600	3,350	3,150	3,020
10 / 50	—	—	—	4,010	3,680	3,420	3,190	3,060
15 / 59	—	—	—	—	3,770	3,490	3,230	3,100
20 / 68	—	—	—	—	3,860	3,560	3,270	3,140
25 / 77	—	—	—	—	3,950	3,640	3,320	3,180
Lndg Wght Temp Limits °C/°F	-30	-15	-4	6/43	25/77	28/82	28/82	28/82
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

LANDING PERFORMANCE

LANDING DISTANCE - FEET (ACTUAL DISTANCE)**; FLAPS 35°**
(Distance from 50 Feet Above the Runway)
Dry Runway, Zero Wind, Anti-Ice Off

Elevation = 14,000 Feet								
	Landing Weight (lb)							
Ambient Temp °C / °F	9,900	9,700	9,500	9,300	8,900	8,500	8,000	7,500
-25 / -13	—	—	4,040	3,880	3,590	3,350	3,200	3,070
-20 / -4	—	—	—	3,980	3,670	3,420	3,240	3,110
-15 / 5	—	—	—	4,090	3,760	3,500	3,290	3,150
-10 / 14	—	—	—	—	3,860	3,570	3,330	3,190
-5 / 23	—	—	—	—	3,950	3,650	3,370	3,230
0 / 32	—	—	—	—	4,050	3,730	3,420	3,270
5 / 41	—	—	—	—	4,150	3,820	3,480	3,320
10 / 50	—	—	—	—	4,260	3,900	3,550	3,360
15 / 59	—	—	—	—	—	3,990	3,620	3,400
20 / 68	—	—	—	—	—	4,090	3,700	3,440
Lndg Wght Temp Limits °C/°F	—	-35/-31	-25/-13	-14/7	8/46	21/70	23/73	23/73
V_{REF} (KIAS)	109	108	107	106	103	101	98	95

STALL SPEEDS

Zero Angle of Bank, Landing Gear Up or Down

Stall Speeds (KCAS)			
	Flap Position		
Weight (lb)	35°	15°	0°
10,700	86	92	98
10,300	85	90	97
9,900	83	88	95
9,500	81	87	93
9,000	79	85	91
8,500	77	82	88
8,000	75	80	86
7,500	73	78	83

MISSION PLANNING

CRITERIA

The following mission planning table provides flight time and fuel burn estimates for selected distances and cruise altitudes.

Flight time represents the time for the climb, cruise and descent portion of the mission. No allowance has been added for taxi, takeoff, approach, or ATC procedures. Fuel burn represents the total amount of fuel consumed for taxi, takeoff, climb, cruise, and descent. There is a taxi and takeoff allowance of 80 pounds of fuel included in all fuel burn figures. NBAA IFR fuel reserves (100 nm) are considered in each case but are not included in the fuel burn figure. Each distance and altitude combination is based on the aircraft departing at the minimum takeoff weight required to complete the mission.

The mission planning table reflects cruise climb, high-speed cruise (maximum cruise thrust setting), and high-speed descent (3,000 fpm) schedules. Standard day conditions are assumed with zero wind enroute. The effects of wind can be determined from the wind correction factors table below. Apply the wind correction factor to the zero wind flight time and fuel burn to estimate the impact of wind.

Typical cruise altitudes for various distances are:

Distance (nm)	Typical Cruise Altitude (ft)
0 - 99	4,000 - 12,000
100 - 199	12,000 - 22,000
200 - 299	21,000 - 31,000
300 - 499	30,000 - 39,000
500 - 999	37,000 - 41,000
1,000 +	39,000 - 41,000

Wind Correction Factors *

True Airspeed	---------- Headwinds (kt) ----------					---------- Tailwinds (kt) ----------			
(kt)	100	75	50	25	0	25	50	75	100
280	1.56	1.37	1.22	1.10	1.00	0.92	0.85	0.79	0.74
300	1.50	1.33	1.20	1.09	1.00	0.92	0.86	0.80	0.75
320	1.45	1.31	1.18	1.08	1.00	0.93	0.86	0.81	0.76
340	1.42	1.28	1.17	1.08	1.00	0.93	0.87	0.82	0.77
360	1.38	1.26	1.16	1.07	1.00	0.93	0.88	0.83	0.78
380	1.36	1.25	1.15	1.07	1.00	0.94	0.88	0.84	0.79
400	1.33	1.23	1.14	1.07	1.00	0.94	0.89	0.84	0.80

* Wind Correction Factor is calculated as KTAS divided by the sum of KTAS ± wind component.

MISSION PLANNING

FLIGHT TIME & FUEL BURN

	Cruise Altitude (ft)									
	15,000		25,000		27,000		29,000		31,000	
Dist (nm)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)
100	0:20	426	0:19	387	0:19	381	0:20	377	0:20	372
200	0:39	773	0:35	685	0:35	673	0:35	662	0:35	641
300	0:58	1,122	0:51	984	0:50	965	0:50	948	0:50	911
400	1:16	1,471	1:07	1,284	1:06	1,259	1:05	1,233	1:05	1,181
500	1:35	1,822	1:23	1,584	1:21	1,553	1:20	1,520	1:20	1,451
600	1:53	2,173	1:39	1,886	1:37	1,848	1:35	1,807	1:35	1,720
700			1:55	2,190	1:52	2,144	1:50	2,095	1:50	1,991
800							2:05	2,384	2:05	2,261
900										
1,000										
1,100										
1,200										
1,300										

Assumptions:
- Cruise climb
- High-speed cruise (maximum cruise thrust setting)
- High-speed descent (3,000 fpm)
- ISA, zero winds enroute
- Flight time includes climb, cruise and descent
- Fuel burn includes 80 pounds for taxi and takeoff
- NBAA IFR Reserves – 100 nm (627 lb) Reserves are not included in the fuel burn figures
- Three passengers @ 200 pounds each
- Aircraft BOW of 6,990 pounds (includes 1 pilot at 200 pounds)

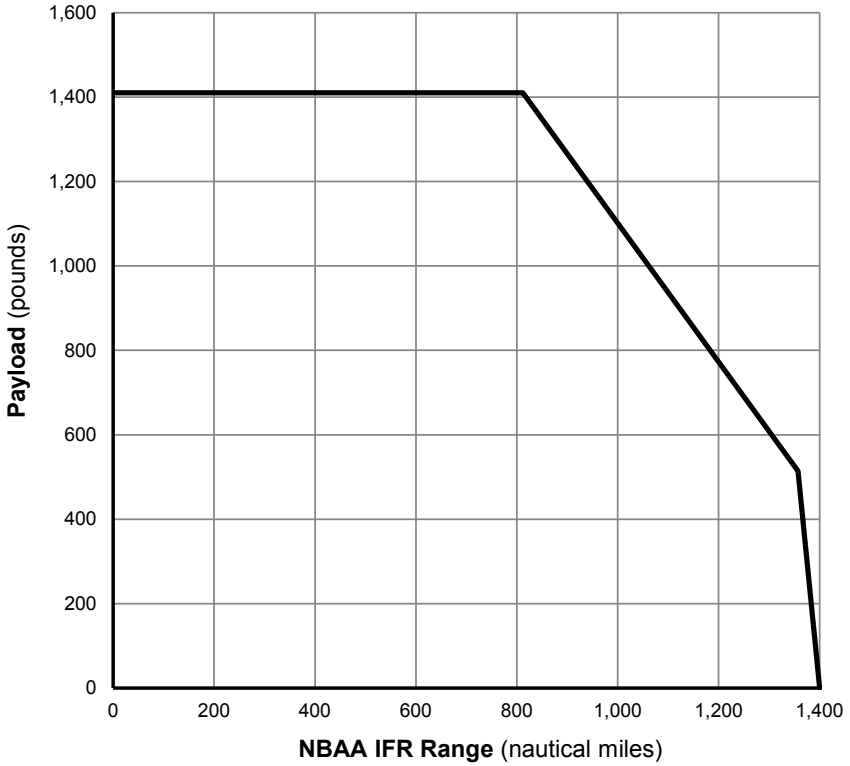
FOR SELECTED DISTANCES

Cruise Altitude (ft)										
33,000		**35,000**		**37,000**		**39,000**		**41,000**		
Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Dist (nm)
										100
0:35	619	0:35	602	0:36	585	0:36	572	0:37	562	200
0:50	870	0:50	836	0:51	799	0:52	768	0:52	742	300
1:05	1,121	1:05	1,070	1:07	1,013	1:07	963	1:08	922	400
1:20	1,373	1:20	1,304	1:22	1,227	1:22	1,159	1:23	1,102	500
1:35	1,624	1:35	1,537	1:37	1,440	1:38	1,355	1:39	1,283	600
1:50	1,876	1:50	1,771	1:52	1,654	1:53	1,552	1:54	1,464	700
2:05	2,128	2:06	2,005	2:07	1,867	2:09	1,748	2:10	1,645	800
2:20	2,381	2:21	2,240	2:23	2,082	2:24	1,944	2:25	1,826	900
		2:36	2,475	2:38	2,297	2:39	2,142	2:41	2,008	1,000
				2:54	2,512	2:55	2,340	2:57	2,190	1,100
						3:11	2,538	3:14	2,373	1,200
								3:30	2,553	1,300

MISSION PLANNING

RANGE / PAYLOAD CAPABILITY

NBAA IFR Reserves (100 nm), ISA
Zero Wind, High-Speed Cruise



Assumptions:
- Cruise climb, maximum cruise thrust setting, 3,000 fpm descent
- FL 410
- Aircraft BOW = 6,990 pounds (includes 1 pilot at 200 pounds)

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