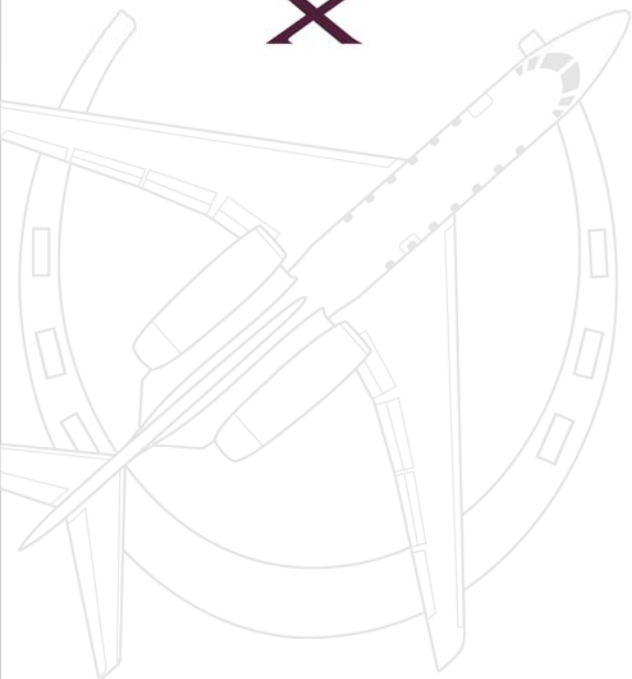


CITATION

X



Flight Planning Guide

January 2011

TABLE OF CONTENTS

This Flight Planning Guide is published for the purpose of evaluating the performance of the Cessna Citation X (Model 750). This guide is developed from data contained in the Citation X Aircraft Flight Manual and Operating Manual. **This document is not intended to be used in lieu of the FAA approved Aircraft Flight Manual or Operating Manual.** The data included herein does not constitute an offer and is subject to change without notice.

Section	Page
Specifications	2
Takeoff Performance	
Decision, Rotation and Takeoff Safety Speeds	4
Takeoff Field Length - 15° Flaps	5
Takeoff Field Length - 5° Flaps	10
Climb Performance	
Climb Speeds.....	15
270 Knots / M 0.78.....	16
300 Knots / M 0.80.....	17
Cruise Performance	
High Speed Cruise.....	18
Mach 0.86 Cruise.....	19
Mach 0.82 Cruise.....	20
Long Range Cruise.....	21
Descent Performance.....	22
Reserve Fuel Calculations	23
Holding Performance.....	23
Landing Performance	24
Stall Speeds	28
Mission Planning Table	29

SPECIFICATIONS

General

Certification Status	14 CFR Part 25
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Engines

Manufacturer	Rolls-Royce	
Model	(2) AE 3007C1	
Thrust Output at S.L. (each)	6,764 lb	30.09 kN
Flat Rating Temperature	86 °F	30 °C
Engine Flight Hour Inspection Interval	4,500 hours	

Exterior Dimensions

Length	72 ft 4 in	22.04 m
Height	19 ft 3 in	5.86 m
Wing Span	63 ft 11 in	19.48 m
Landing Gear Wheelbase	28 ft 8 in	8.74 m
Landing Gear Tread	10 ft 7 in	3.23 m

Internal Dimensions (with typical interior installed)

Length - overall	29 ft 5 in	8.97 m
Length - excluding cockpit	23 ft 11 in	7.29 m
Height	68 in	1.73 m
Width	66 in	1.68 m
Passenger Cabin Volume	593 ft ³	16.79 m ³

Accommodations

Passenger Seats - typical	9 - 12	
Baggage Capacity	103 ft ³	2.91 m ³
	1,104 lb	501 kg

Pressurization

Differential	9.3 psi	0.64 bar
Sea Level Cabin to	25,230 ft	7,690 m
8,000 Foot Cabin at	51,000 ft	15,545 m

Altitudes

Certified	51,000 ft	15,545 m
Service Ceiling - 1 Engine (MTOW)	26,000 ft	7,925 m
Typical Cruise Altitudes	FL 370 - 450	

SPECIFICATIONS

Basic Performance

Takeoff Distance, Sea Level, ISA, MTOW	5,140 ft	1,567 m
Landing Distance, Sea Level, ISA, MLW	3,400 ft	1,036 m
Rate of Climb - 2 Engines	3,650 ft/min	1,113 m/min
Rate of Climb - 1 Engine	1,120 ft/min	341 m/min
Typical Cruise Speeds	480-525 ktas	889-972 km/hr

Airspeed Limitations

Maximum Operating Limit		
M _{MO} (30,650 ft / 9,342 m and above)	M 0.92 Indicated	
V _{MO} (8,000 ft to 30,650 ft / 9,342 m)	350 KIAS	649 km/hr
V _{MO} (Below 8,000 ft / 2,438 m)	270 KIAS	500 km/hr
Maximum Flap Extended Speed (V_{FE})		
Partial Flaps - 5°	250 KIAS	463 km/hr
Partial Flaps - 15°	210 KIAS	389 km/hr
Full Flaps	180 KIAS	334 km/hr
Max Landing Gear Operating Speed - (V _{LO})	210 KIAS	389 km/hr
Max Landing Gear Extended Speed (V _{LE})	210 KIAS	389 km/hr
Max. Speed Brake Operation Speed (V _{SB})	No limit	No limit
Minimum Control Speed, Air (V_{MCA})		
Flaps - 5°	120 KIAS	222 km/hr
Flaps - 15°	112 KIAS	208 km/hr
Minimum Control Speed, Ground (V_{MCG})	111 KIAS	206 km/hr

Certified Weights

Maximum Ramp Weight	36,400 lb	16,510 kg
Maximum Takeoff Weight	36,100 lb	16,375 kg
Maximum Landing Weight	31,800 lb	14,424 kg
Maximum Zero Fuel Weight	24,400 lb	11,068 kg
Maximum Fuel Capacity (6.7 lb/gal)	12,931 lb	5,865 kg

Basic Operating Weight

Typically-Equipped Empty Weight	21,700 lb	9,843 kg
Two Crew & Furnishings	400 lb	181 kg
Basic Operating Weight	22,100 lb	10,024 kg

Payload

Useful Payload and Fuel	14,300 lb	6,486 kg
Maximum Payload	2,300 lb	1,043 kg
Payload at Full Fuel	1,369 lb	621 kg

TAKEOFF PERFORMANCE

14 CFR FAR 25 takeoff field lengths are shown on the following pages. FAR 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. These factors are reflected in the takeoff field lengths presented.

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

Two flap settings are shown for the aircraft: 15° and 5°. 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 5° flap setting is available. A 5° 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
Sea Level, Dry Runway, ISA, Zero Wind, Anti-Ice Off, KIAS

Takeoff Weight (lb)	15° Flap Setting			5° Flap Setting		
	Decision Speed	Rotation Speed	Safety Speed	Decision Speed	Rotation Speed	Safety Speed
	V ₁	V _R	V ₂	V ₁	V _R	V ₂
36,100	129	133	137	134	134	144
35,000	126	131	135	132	132	143
34,000	124	128	133	130	130	140
33,000	121	126	131	127	127	138
31,000	116	120	128	126	126	138
29,000	115	117	129	125	126	138
27,000	115	117	130	123	126	139
25,000	115	118	131	122	126	139

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 15° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = Sea Level								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
0 / 32	4,890	4,610	4,340	4,080	3,680	3,520	3,440	3,360
10 / 50	5,050	4,760	4,490	4,220	3,800	3,620	3,520	3,440
15 / 59	5,140	4,850	4,560	4,300	3,850	3,670	3,560	3,480
20 / 68	5,230	4,930	4,640	4,370	3,920	3,730	3,600	3,510
25 / 77	5,340	5,030	4,740	4,460	3,990	3,800	3,640	3,550
30 / 86	5,480	5,150	4,850	4,560	4,060	3,870	3,690	3,600
35 / 95	5,910	5,520	5,200	4,890	4,260	3,890	3,710	3,560
40 / 104	6,450	6,000	5,620	5,270	4,580	3,970	3,730	3,530
45 / 113	—	—	6,110	5,720	4,950	4,280	3,730	3,540
50 / 122	—	—	—	—	5,390	4,630	3,990	3,550
Climb Wght Temp Limits °C/°F	41/106	43/109	46/115	48/118	54/129	54/129	54/129	54/129
Field Length at Temp Limits (ft)	6,580	6,330	6,220	6,030	5,780	4,950	4,260	3,630

Elevation = 1,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
0 / 32	5,050	4,760	4,480	4,220	3,800	3,630	3,540	3,460
10 / 50	5,220	4,920	4,640	4,370	3,920	3,730	3,630	3,540
15 / 59	5,310	5,010	4,720	4,440	3,980	3,790	3,670	3,580
20 / 68	5,420	5,100	4,810	4,520	4,050	3,860	3,710	3,620
25 / 77	5,550	5,210	4,910	4,620	4,130	3,930	3,750	3,660
30 / 86	5,930	5,530	5,210	4,900	4,270	3,980	3,780	3,650
35 / 95	6,480	6,030	5,640	5,290	4,600	3,990	3,800	3,600
40 / 104	—	6,590	6,120	5,730	4,970	4,290	3,810	3,610
45 / 113	—	—	—	6,240	5,390	4,640	4,010	3,630
50 / 122	—	—	—	—	5,880	5,040	4,330	3,700
Climb Wght Temp Limits °C/°F	37/99	40/104	42/108	45/113	50/122	52/126	52/126	52/126
Field Length at Temp Limits (ft)	6,720	6,590	6,350	6,240	5,880	4,220	4,480	3,820

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 15° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 2,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
0 / 32	5,210	4,920	4,630	4,360	3,930	3,750	3,660	3,570
10 / 50	5,400	5,080	4,790	4,510	4,060	3,860	3,740	3,650
15 / 59	5,510	5,170	4,880	4,590	4,120	3,920	3,780	3,690
20 / 68	5,640	5,280	4,980	4,680	4,200	4,000	3,820	3,730
25 / 77	5,960	5,560	5,220	4,920	4,290	4,050	3,850	3,730
30 / 86	6,500	6,040	5,650	5,300	4,620	4,050	3,870	3,690
35 / 95	—	6,610	6,140	5,740	4,990	4,310	3,890	3,680
40 / 104	—	—	—	6,250	5,400	4,650	4,020	3,710
45 / 113	—	—	—	—	5,880	5,040	4,340	3,710
50 / 122	—	—	—	—	—	5,490	4,710	4,010
Climb Wght Temp Limits °C/°F	33/91	36/97	39/102	41/106	47/117	50/122	50/122	50/122
Field Length at Temp Limits (ft)	6,870	6,730	6,600	6,360	6,090	5,490	4,710	4,010

Elevation = 3,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
-10 / 14	5,220	4,920	4,640	4,370	3,930	3,750	3,660	3,570
0 / 32	5,410	5,090	4,800	4,510	4,060	3,870	3,770	3,680
10 / 50	5,620	5,260	4,960	4,670	4,190	3,990	3,850	3,760
15 / 59	5,740	5,370	5,060	4,760	4,260	4,060	3,890	3,800
20 / 68	6,000	5,600	5,260	4,950	4,320	4,120	3,910	3,810
25 / 77	6,530	6,080	5,670	5,330	4,640	4,130	3,950	3,770
30 / 86	—	6,640	6,180	5,770	5,010	4,340	3,970	3,750
35 / 95	—	—	6,760	6,260	5,420	4,670	4,040	3,780
40 / 104	—	—	—	—	5,890	5,060	4,360	3,770
45 / 113	—	—	—	—	—	5,500	4,720	4,020
Climb Wght Temp Limits °C/°F	29/84	32/90	35/95	37/99	43/109	48/118	48/118	48/118
Field Length at Temp Limits (ft)	7,020	6,890	6,760	6,500	6,200	5,790	4,950	4,210

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 15° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 4,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
-10 / 14	5,420	5,100	4,800	4,520	4,060	3,870	3,780	3,680
0 / 32	5,630	5,270	4,970	4,680	4,190	3,990	3,880	3,790
10 / 50	5,850	5,460	5,140	4,840	4,330	4,120	3,970	3,870
15 / 59	6,040	5,640	5,290	4,980	4,390	4,190	3,990	3,890
20 / 68	6,580	6,130	5,710	5,360	4,680	4,210	4,010	3,850
25 / 77	7,190	6,680	6,210	5,790	5,040	4,360	4,050	3,820
30 / 86	—	—	6,800	6,310	5,450	4,710	4,070	3,850
35 / 95	—	—	—	—	5,910	5,080	4,380	3,860
40 / 104	—	—	—	—	—	5,520	4,750	4,040
45 / 113	—	—	—	—	—	6,000	5,130	4,360
Climb Wght Temp Limits °C/°F	25/77	28/82	31/88	34/93	39/102	46/115	46/115	46/115
Field Length at Temp Limits (ft)	7,190	7,060	6,920	6,780	6,330	6,120	5,220	4,430

Elevation = 5,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
-10 / 14	5,610	5,260	4,960	4,670	4,200	4,000	3,900	3,800
0 / 32	5,840	5,450	5,130	4,830	4,340	4,130	4,010	3,910
5 / 41	5,950	5,550	5,210	4,910	4,410	4,200	4,050	3,950
10 / 50	6,120	5,710	5,340	5,030	4,470	4,260	4,080	3,980
15 / 59	6,630	6,170	5,760	5,400	4,710	4,290	4,080	3,930
20 / 68	7,250	6,730	6,260	5,830	5,070	4,400	4,120	3,890
25 / 77	—	—	6,830	6,340	5,470	4,730	4,120	3,920
30 / 86	—	—	—	6,930	5,930	5,110	4,410	3,940
35 / 95	—	—	—	—	6,460	5,530	4,760	4,060
40 / 104	—	—	—	—	—	6,020	5,150	4,380
Climb Wght Temp Limits °C/°F	22/72	24/75	27/81	30/86	35/95	42/108	44/111	44/111
Field Length at Temp Limits (ft)	7,520	7,230	7,090	6,930	6,460	6,230	5,490	4,650

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 15° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 6,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
-10 / 14	5,930	5,540	5,210	4,900	4,320	4,120	4,000	3,900
0 / 32	6,170	5,760	5,380	5,070	4,470	4,260	4,110	4,000
5 / 41	6,300	5,870	5,480	5,160	4,540	4,330	4,150	4,050
10 / 50	6,680	6,220	5,800	5,430	4,740	4,380	4,160	4,020
15 / 59	7,310	6,780	6,310	5,870	5,110	4,430	4,190	3,980
20 / 68	—	7,410	6,870	6,380	5,500	4,760	4,210	3,990
25 / 77	—	—	—	6,940	5,930	5,120	4,420	4,030
30 / 86	—	—	—	—	6,360	5,470	4,720	4,030
35 / 95	—	—	—	—	—	5,870	5,040	4,300
40 / 104	—	—	—	—	—	6,320	5,400	4,590
Climb Wght Temp Limits °C/°F	18/64	21/70	24/75	27/81	34/93	41/106	42/108	42/108
Field Length at Temp Limits (ft)	7,720	7,540	7,360	7,160	6,760	6,420	5,550	4,710

Elevation = 7,000 Feet								
Ambient Temp	Takeoff Weight (lb)							
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000
-20 / -4	6,070	5,670	5,320	5,010	4,370	4,100	3,970	3,860
-10 / 14	6,320	5,890	5,500	5,180	4,520	4,250	4,090	3,980
0 / 32	6,580	6,130	5,720	5,360	4,680	4,400	4,200	4,090
5 / 41	6,820	6,350	5,920	5,520	4,830	4,450	4,230	4,100
10 / 50	7,370	6,840	6,360	5,920	5,150	4,470	4,270	4,060
15 / 59	—	7,410	6,880	6,390	5,510	4,770	4,300	4,070
20 / 68	—	—	7,390	6,850	5,860	5,070	4,390	4,110
25 / 77	—	—	—	7,360	6,250	5,390	4,650	4,150
30 / 86	—	—	—	—	6,700	5,750	4,950	4,230
35 / 95	—	—	—	—	—	6,150	5,280	4,500
Climb Wght Temp Limits °C/°F	14/57	18/64	22/72	26/79	33/91	39/102	39/102	39/102
Field Length at Temp Limits (ft)	7,880	7,750	7,610	7,470	7,010	6,530	5,570	4,740

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 15° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 8,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-20 / -4	6,540	6,090	5,680	5,330	4,660	4,210	4,040	3,940	
-10 / 14	6,810	6,330	5,900	5,520	4,820	4,360	4,170	4,060	
0 / 32	7,110	6,610	6,160	5,740	5,000	4,500	4,290	4,150	
5 / 41	7,530	6,990	6,500	6,050	5,240	4,550	4,340	4,140	
10 / 50	8,000	7,410	6,880	6,390	5,510	4,770	4,400	4,150	
15 / 59	—	7,920	7,330	6,800	5,820	5,040	4,430	4,200	
20 / 68	—	—	7,830	7,240	6,160	5,320	4,600	4,250	
25 / 77	—	—	—	—	6,570	5,650	4,880	4,280	
30 / 86	—	—	—	—	7,060	6,020	5,190	4,430	
35 / 95	—	—	—	—	—	6,440	5,530	4,710	
Climb Wght Temp Limits °C/°F	12/54	16/61	20/68	25/77	31/88	37/99	37/99	37/99	
Field Length at Temp Limits (ft)	8,210	8,020	7,830	7,660	7,160	6,640	5,680	4,830	

Elevation = 9,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-20 / -4	7,010	6,520	6,070	5,670	4,940	4,320	4,130	4,020	
-10 / 14	7,310	6,790	6,320	5,880	5,120	4,470	4,280	4,140	
-5 / 23	7,460	6,930	6,440	5,990	5,200	4,550	4,350	4,190	
0 / 32	7,750	7,180	6,680	6,210	5,370	4,660	4,400	4,200	
5 / 41	8,230	7,620	7,070	6,570	5,640	4,890	4,460	4,210	
10 / 50	—	8,100	7,500	6,950	5,940	5,140	4,500	4,270	
15 / 59	—	—	8,000	7,400	6,270	5,420	4,690	4,330	
20 / 68	—	—	—	7,920	6,680	5,740	4,950	4,360	
25 / 77	—	—	—	—	7,210	6,140	5,290	4,510	
30 / 86	—	—	—	—	—	6,600	5,660	4,820	
Climb Wght Temp Limits °C/°F	7/45	11/52	16/61	20/68	26/79	33/91	34/93	34/93	
Field Length at Temp Limits (ft)	8,440	8,210	8,110	7,920	7,320	6,940	6,000	5,100	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 5° FLAPS

(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)								
	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
0 / 32	5,750	5,330	4,960	4,610	4,220	3,940	3,720	3,510	
10 / 50	5,950	5,520	5,130	4,760	4,360	4,070	3,840	3,620	
15 / 59	6,050	5,610	5,220	4,850	4,420	4,140	3,900	3,680	
20 / 68	6,160	5,720	5,310	4,930	4,500	4,210	3,970	3,740	
25 / 77	6,320	5,850	5,440	5,050	4,600	4,290	4,040	3,810	
30 / 86	6,500	6,030	5,590	5,190	4,700	4,360	4,110	3,870	
35 / 95	7,220	6,660	6,150	5,690	4,880	4,450	4,170	3,910	
40 / 104	8,220	7,510	6,900	6,340	5,320	4,620	4,220	3,940	
45 / 113	—	8,670	7,880	7,180	5,940	4,940	4,370	3,990	
50 / 122	—	—	—	8,340	6,750	5,530	4,580	4,100	
Climb Wght Temp Limits °C/°F	43/109	46/115	48/118	51/124	54/129	54/129	54/129	54/129	
Field Length at Temp Limits (ft)	9,000	8,970	8,670	8,620	7,590	6,100	5,010	4,240	

Elevation = 1,000 Feet									
Ambient Temp °C / °F	Takeoff Weight (lb)								
	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
0 / 32	5,930	5,500	5,120	4,750	4,350	4,070	3,840	3,620	
10 / 50	6,140	5,690	5,290	4,920	4,500	4,200	3,970	3,740	
15 / 59	6,240	5,790	5,380	5,000	4,570	4,270	4,030	3,800	
20 / 68	6,380	5,920	5,500	5,110	4,660	4,350	4,110	3,870	
25 / 77	6,550	6,070	5,630	5,230	4,760	4,440	4,180	3,940	
30 / 86	7,140	6,600	6,110	5,660	4,920	4,490	4,230	3,980	
35 / 95	8,120	7,440	6,840	6,300	5,300	4,670	4,290	4,020	
40 / 104	9,390	8,500	7,760	7,090	5,890	4,920	4,420	4,060	
45 / 113	—	—	9,040	8,160	6,660	5,480	4,600	4,150	
50 / 122	—	—	—	—	7,670	6,180	5,080	4,310	
Climb Wght Temp Limits °C/°F	40/104	42/108	45/113	47/117	52/126	52/126	52/126	52/126	
Field Length at Temp Limits (ft)	9,390	9,050	9,040	8,710	8,180	6,520	5,320	4,390	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 5° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 2,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
0 / 32	6,120	5,680	5,280	4,910	4,490	4,210	3,970	3,750	
10 / 50	6,330	5,870	5,460	5,070	4,640	4,350	4,110	3,870	
15 / 59	6,440	5,980	5,560	5,160	4,720	4,420	4,170	3,930	
20 / 68	6,600	6,120	5,690	5,280	4,820	4,500	4,250	4,010	
25 / 77	7,080	6,550	6,070	5,630	4,970	4,570	4,310	4,060	
30 / 86	8,000	7,350	6,780	6,250	5,270	4,710	4,370	4,090	
35 / 95	9,220	8,380	7,670	7,030	5,860	4,910	4,470	4,140	
40 / 104	—	—	8,820	8,010	6,570	5,440	4,640	4,190	
45 / 113	—	—	—	—	7,520	6,110	5,040	4,350	
50 / 122	—	—	—	—	—	6,980	5,660	4,610	
Climb Wght Temp									
Limits °C/°F	36/97	39/102	41/106	44/111	49/120	50/122	50/122	50/122	
Field Length at									
Temp Limits (ft)	9,510	9,450	9,110	9,090	8,520	6,980	5,660	4,610	

Elevation = 3,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-10 / 14	6,130	5,680	5,280	4,910	4,490	4,210	3,970	3,740	
0 / 32	6,330	5,870	5,460	5,080	4,640	4,350	4,110	3,870	
10 / 50	6,550	6,080	5,650	5,250	4,800	4,490	4,240	4,000	
15 / 59	6,690	6,210	5,770	5,360	4,890	4,570	4,320	4,070	
20 / 68	7,060	6,540	6,070	5,630	5,020	4,650	4,390	4,130	
25 / 77	7,920	7,290	6,730	6,220	5,260	4,760	4,450	4,170	
30 / 86	9,070	8,280	7,600	6,980	5,840	4,960	4,520	4,210	
35 / 95	—	9,570	8,680	7,910	6,520	5,420	4,690	4,260	
40 / 104	—	—	—	9,170	7,410	6,060	5,020	4,400	
45 / 113	—	—	—	—	8,600	6,870	5,600	4,590	
Climb Wght Temp									
Limits °C/°F	32/90	35/95	37/99	40/104	45/113	48/118	48/118	48/118	
Field Length at									
Temp Limits (ft)	9,650	9,570	9,220	9,170	8,600	7,480	6,020	4,880	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 5° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 4,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-10 / 14	6,340	5,880	5,470	5,080	4,640	4,350	4,110	3,870	
0 / 32	6,560	6,080	5,660	5,260	4,800	4,500	4,250	4,000	
10 / 50	6,780	6,290	5,850	5,440	4,960	4,640	4,390	4,130	
15 / 59	7,030	6,520	6,060	5,620	5,080	4,730	4,460	4,200	
20 / 68	7,890	7,270	6,720	6,220	5,280	4,820	4,520	4,240	
25 / 77	8,950	8,200	7,530	6,930	5,820	5,010	4,580	4,280	
30 / 86	—	9,450	8,600	7,860	6,510	5,420	4,740	4,340	
35 / 95	—	—	—	9,010	7,330	6,020	5,010	4,450	
40 / 104	—	—	—	—	8,460	6,810	5,580	4,640	
45 / 113	—	—	—	—	—	7,800	6,260	5,070	
Climb Wght Temp Limits °C/°F	28/82	31/88	34/93	36/97	42/108	46/115	46/115	46/115	
Field Length at Temp Limits (ft)	9,800	9,740	9,680	9,300	9,000	8,030	6,420	5,180	

Elevation = 5,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-10 / 14	6,520	6,060	5,630	5,230	4,790	4,500	4,250	4,000	
0 / 32	6,750	6,260	5,820	5,410	4,960	4,650	4,390	4,140	
5 / 41	6,860	6,370	5,920	5,510	5,040	4,730	4,470	4,210	
10 / 50	7,060	6,550	6,090	5,660	5,140	4,800	4,540	4,270	
15 / 59	7,850	7,250	6,710	6,220	5,340	4,880	4,590	4,320	
20 / 68	8,880	8,150	7,500	6,910	5,820	5,060	4,660	4,360	
25 / 77	—	9,300	8,490	7,780	6,470	5,400	4,800	4,420	
30 / 86	—	—	9,810	8,880	7,270	6,000	5,000	4,500	
35 / 95	—	—	—	—	8,300	6,730	5,540	4,680	
40 / 104	—	—	—	—	—	7,680	6,210	5,050	
Climb Wght Temp Limits °C/°F	24/75	27/81	30/86	33/91	38/100	44/111	44/111	44/111	
Field Length at Temp Limits (ft)	9,940	9,890	9,810	9,730	9,120	8,610	6,840	5,490	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 5° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 6,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-10 / 14	6,900	6,400	5,940	5,520	4,980	4,650	4,390	4,130	
0 / 32	7,130	6,620	6,150	5,710	5,150	4,810	4,540	4,270	
5 / 41	7,260	6,730	6,260	5,810	5,230	4,890	4,610	4,340	
10 / 50	7,820	7,230	6,700	6,210	5,390	4,960	4,680	4,400	
15 / 59	8,830	8,120	7,490	6,910	5,830	5,110	4,740	4,440	
20 / 68	10,100	9,190	8,420	7,720	6,450	5,400	4,850	4,490	
25 / 77	—	—	9,580	8,710	7,180	5,950	5,040	4,550	
30 / 86	—	—	—	9,840	7,970	6,530	5,410	4,710	
35 / 95	—	—	—	—	8,970	7,230	5,940	4,890	
40 / 104	—	—	—	—	—	8,100	6,540	5,310	
Climb Wght Temp									
Limits °C/°F	21/70	24/75	27/81	30/86	37/99	42/108	42/108	42/108	
Field Length at									
Temp Limits (ft)	10,390	10,260	10,090	9,840	9,470	8,520	6,820	5,510	

Elevation = 7,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-20 / -4	7,130	6,600	6,130	5,690	5,000	4,640	4,370	4,110	
-10 / 14	7,370	6,820	6,330	5,880	5,180	4,810	4,530	4,260	
0 / 32	7,620	7,060	6,550	6,080	5,360	4,970	4,680	4,410	
5 / 41	7,920	7,330	6,800	6,310	5,470	5,050	4,750	4,470	
10 / 50	8,780	8,090	7,470	6,900	5,830	5,170	4,820	4,520	
15 / 59	9,850	9,010	8,280	7,620	6,390	5,370	4,900	4,580	
20 / 68	—	10,020	9,140	8,370	6,950	5,800	5,070	4,650	
25 / 77	—	—	10,220	9,270	7,620	6,300	5,260	4,740	
30 / 86	—	—	—	—	8,440	6,900	5,710	4,890	
35 / 95	—	—	—	—	9,490	7,630	6,250	5,120	
Climb Wght Temp									
Limits °C/°F	18/64	22/72	26/79	29/84	36/97	39/102	39/102	39/102	
Field Length at									
Temp Limits (ft)	10,550	10,490	10,470	10,190	9,730	8,320	6,730	5,470	

TAKEOFF PERFORMANCE

TAKEOFF FIELD LENGTH - 5° FLAPS

(Over 35 Foot Screen Height)

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

Elevation = 8,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-20 / -4	7,730	7,140	6,620	6,130	5,230	4,790	4,510	4,230	
-10 / 14	7,990	7,380	6,840	6,340	5,410	4,960	4,670	4,390	
0 / 32	8,290	7,660	7,100	6,580	5,600	5,130	4,830	4,530	
5 / 41	8,900	8,200	7,580	7,010	5,930	5,250	4,900	4,590	
10 / 50	9,630	8,840	8,150	7,510	6,320	5,420	4,990	4,670	
15 / 59	10,610	9,670	8,870	8,150	6,810	5,700	5,110	4,730	
20 / 68	—	10,660	9,710	8,870	7,350	6,120	5,280	4,810	
25 / 77	—	—	—	9,810	8,050	6,640	5,530	4,920	
30 / 86	—	—	—	—	8,910	7,270	6,010	5,090	
35 / 95	—	—	—	—	10,030	8,040	6,570	5,370	
Climb Wght Temp Limits °C/°F	16/61	21/70	24/75	28/82	35/95	37/99	37/99	37/99	
Field Length at Temp Limits (ft)	10,830	10,890	10,580	10,530	10,030	8,390	6,820	5,560	

Elevation = 9,000 Feet									
Ambient Temp	Takeoff Weight (lb)								
°C / °F	36,100	35,000	34,000	33,000	31,000	29,000	27,000	25,000	
-20 / -4	8,340	7,690	7,110	6,580	5,570	4,970	4,650	4,360	
-10 / 14	8,620	7,950	7,350	6,800	5,760	5,140	4,820	4,520	
-5 / 23	8,760	8,080	7,480	6,920	5,860	5,230	4,900	4,600	
0 / 32	9,120	8,410	7,770	7,190	6,070	5,340	4,980	4,660	
5 / 41	9,870	9,060	8,350	7,700	6,480	5,510	5,070	4,740	
10 / 50	10,780	9,830	9,020	8,290	6,930	5,810	5,190	4,810	
15 / 59	—	10,800	9,850	9,000	7,470	6,220	5,360	4,900	
20 / 68	—	—	10,930	9,910	8,140	6,720	5,600	5,000	
25 / 77	—	—	—	—	9,050	7,390	6,110	5,180	
30 / 86	—	—	—	—	10,270	8,220	6,720	5,490	
Climb Wght Temp Limits °C/°F	12/54	16/61	20/68	23/73	30/86	34/93	34/93	34/93	
Field Length at Temp Limits (ft)	11,210	11,030	10,930	10,660	10,270	9,070	7,310	5,930	

CLIMB PERFORMANCE

Two climb schedules are shown on the following pages: 270 KIAS transitioning to Mach 0.78, and 300 KIAS transitioning to Mach 0.80.

The 270 KIAS / M 0.78 Climb schedule results in the minimal amount of time to reach a selected altitude.

The 300 KIAS / M 0.80 Climb schedule provides a balance between forward speed and rate of climb.

The table below shows the indicated airspeeds at various altitudes for the various climb schedules.

Each climb schedule is based on the climb starting at sea level. Weights represent the weight of the aircraft at the start of the climb.

CLIMB SPEEDS KIAS

	----- Pressure Altitude (ft) -----							
	S.L.	10,000	20,000	30,000	35,000	40,000	45,000	50,000
270 KIAS / M 0.78	270	270	270	270	265	236	210	187
300 KIAS / M 0.80	270	300	300	300	272	242	216	192

CLIMB PERFORMANCE

270 KIAS / M 0.78 CLIMB
ISA, Zero Wind, Anti-Ice Off

Time, Fuel, and Distance To Climb							
Pressure Altitude (ft)		----- Takeoff Weight (lb) -----					
		36,100	35,000	34,000	32,000	30,000	26,000
15,000	Min	5	5	5	4	4	3
	Lb	366	351	337	311	286	240
	NM	26	25	24	22	20	17
25,000	Min	10	9	9	8	7	6
	Lb	629	601	576	529	485	405
	NM	53	51	49	44	41	34
35,000	Min	16	15	14	13	12	10
	Lb	951	904	863	787	717	591
	NM	98	93	89	81	73	60
37,000	Min	17	16	16	14	13	11
	Lb	1,008	957	913	830	755	621
	NM	108	102	97	88	80	65
39,000	Min	19	18	17	15	14	11
	Lb	1,079	1,021	972	881	799	654
	NM	121	114	108	97	87	71
41,000	Min	21	20	19	17	15	12
	Lb	1,172	1,103	1,045	941	849	691
	NM	139	130	122	109	97	78
43,000	Min	26	24	22	19	17	14
	Lb	1,332	1,229	1,150	1,020	911	733
	NM	174	158	145	126	111	87
45,000	Min	* 83	* 51	29	23	20	15
	Lb	3,220	2,122	1,374	1,143	995	782
	NM	641	377	200	156	131	99
47,000	Min	* 191	* 159	* 128	* 63	25	17
	Lb	6,429	5,329	4,329	2,329	1,149	845
	NM	1,517	1,252	1,007	479	172	116
49,000	Min	* 311	* 279	* 248	* 183	* 115	21
	Lb	9,665	8,565	7,565	5,565	3,564	949
	NM	2,495	2,230	1,985	1,457	904	147

* Step climb required. Step climb data includes time, fuel, and distance used in the cruise portion which is based on maximum cruise thrust (high speed cruise).

CLIMB PERFORMANCE

300 KIAS / M 0.80 CLIMB
ISA, Zero Wind, Anti-Ice Off

Time, Fuel, and Distance To Climb							
Pressure Altitude (ft)		----- Takeoff Weight (lb) -----					
		36,100	35,000	34,000	32,000	30,000	26,000
15,000	Min	6	6	5	5	4	4
	Lb	408	391	376	346	319	267
	NM	31	29	28	26	24	20
25,000	Min	11	11	10	9	8	7
	Lb	725	692	663	609	558	465
	NM	66	63	60	55	51	42
35,000	Min	18	17	16	15	13	11
	Lb	1,078	1,024	977	890	810	667
	NM	118	112	106	97	88	72
37,000	Min	19	18	17	16	14	12
	Lb	1,136	1,078	1,028	935	850	698
	NM	128	121	115	104	94	77
39,000	Min	21	20	19	17	15	12
	Lb	1,209	1,144	1,088	987	895	733
	NM	141	133	126	114	102	83
41,000	Min	23	22	21	19	17	13
	Lb	1,309	1,231	1,166	1,050	947	771
	NM	161	150	142	126	113	91
43,000	Min	29	26	24	21	18	15
	Lb	1,489	1,370	1,281	1,133	1,012	814
	NM	201	181	167	145	127	100
45,000	Min	* 94	* 61	32	25	21	16
	Lb	3,636	2,536	1,541	1,270	1,102	865
	NM	734	470	231	178	149	113
47,000	Min	* 206	* 174	* 145	* 80	28	19
	Lb	7,004	5,904	4,904	2,903	1,287	933
	NM	1,657	1,393	1,153	627	200	131
49,000	Min	* 325	* 293	* 264	* 199	* 133	24
	Lb	10,214	6,114	8,114	6,114	4,111	1,056
	NM	2,632	2,368	2,128	1,602	1,058	168

* Step climb required. Step climb data includes time, fuel, and distance used in the cruise portion which is based on maximum cruise thrust (high speed cruise).

CRUISE PERFORMANCE

HIGH SPEED CRUISE

ISA, Anti-Ice Off

Cruise Speed & Fuel Flow							
Pressure Altitude (ft)	Cruise Weight (lb) -----						
	36,000	34,000	32,000	30,000	28,000	26,000	
5,000 KTAS	291	291	291	291	291	291	
	Lb/Hr 2,449	2,420	2,394	2,369	2,346	2,324	
10,000 KTAS	402	402	402	402	402	402	
	Lb/Hr 3,503	3,485	3,468	3,451	3,436	3,422	
15,000 KTAS	431	431	431	431	431	431	
	Lb/Hr 3,372	3,353	3,335	3,319	3,303	3,289	
21,000 KTAS	460	462	464	465	467	468	
	Lb/Hr 3,121	3,124	3,127	3,130	3,132	3,135	
25,000 KTAS	493	494	496	497	498	498	
	Lb/Hr 3,169	3,171	3,173	3,175	3,167	3,150	
29,000 KTAS	515	516	516	517	518	518	
	Lb/Hr 3,115	3,115	3,115	3,115	3,115	3,115	
31,000 KTAS	520	521	522	522	523	523	
	Lb/Hr 3,118	3,121	3,122	3,123	3,124	3,125	
33,000 KTAS	521	523	525	525	526	526	
	Lb/Hr 3,047	3,051	3,053	3,055	3,055	3,056	
35,000 KTAS	519	521	523	525	525	526	
	Lb/Hr 2,910	2,914	2,917	2,920	2,921	2,922	
37,000 KTAS	516	519	521	523	525	526	
	Lb/Hr 2,755	2,759	2,763	2,767	2,770	2,771	
39,000 KTAS	509	513	516	519	521	524	
	Lb/Hr 2,469	2,475	2,480	2,484	2,489	2,492	
41,000 KTAS	502	506	509	513	516	520	
	Lb/Hr 2,218	2,222	2,227	2,233	2,237	2,241	
43,000 KTAS	490	497	502	506	510	514	
	Lb/Hr 1,991	1,998	2,004	2,008	2,013	2,018	
45,000 KTAS	469	481	491	498	503	508	
	Lb/Hr 1,781	1,790	1,797	1,804	1,809	1,813	
47,000 KTAS		455	471	483	493	500	
	Lb/Hr	1,595	1,608	1,616	1,623	1,629	
49,000 KTAS				456	474	487	
	Lb/Hr			1,433	1,446	1,454	

CRUISE PERFORMANCE

MACH 0.86 CRUISE

ISA, Anti-Ice Off

Cruise Speed & Fuel Flow							
Pressure Altitude (ft)		Cruise Weight (lb) -----					
		36,000	34,000	32,000	30,000	28,000	26,000
35,000	KTAS	496	496	496	496	496	496
	Lb/Hr	2,410	2,366	2,323	2,286	2,253	2,228
37,000	KTAS	494	494	494	494	494	494
	Lb/Hr	2,260	2,214	2,169	2,125	2,085	2,051
39,000	KTAS	494	494	494	494	494	494
	Lb/Hr	2,156	2,096	2,045	1,999	1,955	1,913
41,000	KTAS	493	493	493	493	493	493
	Lb/Hr	2,084	2,009	1,943	1,889	1,841	1,795
43,000	KTAS		493	493	493	493	493
	Lb/Hr		1,949	1,871	1,801	1,740	1,691
45,000	KTAS			491	493	493	493
	Lb/Hr			1,797	1,741	1,667	1,604
47,000	KTAS					492	492
	Lb/Hr					1,618	1,540

CRUISE PERFORMANCE

MACH 0.82 CRUISE
ISA, Anti-Ice Off

Cruise Speed & Fuel Flow							
Pressure Altitude (ft)	Cruise Weight (lb)						
	36,000	34,000	32,000	30,000	28,000	26,000	
35,000 KTAS	474	474	474	474	474	474	474
	Lb/Hr 2,148	2,111	2,077	2,047	2,019	1,992	
37,000 KTAS	471	471	471	471	471	471	471
	Lb/Hr 2,021	1,974	1,934	1,899	1,867	1,838	
39,000 KTAS	471	471	471	471	471	471	471
	Lb/Hr 1,932	1,877	1,828	1,784	1,746	1,713	
41,000 KTAS	471	471	471	471	471	471	471
	Lb/Hr 1,866	1,800	1,743	1,690	1,643	1,603	
43,000 KTAS	471	471	471	471	471	471	471
	Lb/Hr 1,816	1,746	1,679	1,617	1,561	1,512	
45,000 KTAS	469	470	470	470	470	470	470
	Lb/Hr 1,781	1,707	1,632	1,563	1,498	1,440	
47,000 KTAS			470	470	470	470	470
	Lb/Hr		1,603	1,524	1,452	1,385	
49,000 KTAS					470	470	470
	Lb/Hr				1,421	1,347	

CRUISE PERFORMANCE

Long Range Cruise ISA, Anti-Ice Off

Cruise Speed & Fuel Flow							
Pressure Altitude (ft)		Cruise Weight (lb) -----					
		36,000	34,000	32,000	30,000	28,000	26,000
5,000	KTAS	256	252	248	243	237	231
	Lb/Hr	2,063	1,983	1,909	1,828	1,746	1,663
10,000	KTAS	274	267	260	254	248	242
	Lb/Hr	1,980	1,883	1,790	1,704	1,620	1,539
15,000	KTAS	298	289	281	273	265	257
	Lb/Hr	1,930	1,829	1,734	1,638	1,542	1,456
21,000	KTAS	331	323	314	304	294	285
	Lb/Hr	1,868	1,780	1,687	1,588	1,494	1,402
23,000	KTAS	340	333	325	316	306	295
	Lb/Hr	1,830	1,748	1,663	1,574	1,481	1,388
25,000	KTAS	350	343	334	326	317	306
	Lb/Hr	1,804	1,719	1,633	1,547	1,464	1,370
27,000	KTAS	363	354	343	334	326	317
	Lb/Hr	1,788	1,695	1,600	1,511	1,435	1,350
29,000	KTAS	374	365	355	345	336	326
	Lb/Hr	1,763	1,673	1,581	1,493	1,407	1,326
31,000	KTAS	383	378	367	357	347	336
	Lb/Hr	1,730	1,656	1,564	1,476	1,387	1,302
33,000	KTAS	394	386	379	369	359	347
	Lb/Hr	1,710	1,623	1,544	1,455	1,372	1,280

DESCENT PERFORMANCE

HIGH SPEED & NORMAL DESCENT
ISA, Zero Wind, Anti-Ice Off,
Speed Brakes Retracted, Gear & Flaps Up

Time, Fuel, and Distance To Descend *							
Pressure Altitude (ft)		High Speed – 3,000 FPM			Normal – 2,000 FPM		
		----- Start of Descent Weight (lb) -----			----- Start of Descent Weight (lb) -----		
		26,000	24,000	22,000	26,000	24,000	22,000
15,000	Min	6	7	7	8	8	8
	Lb	95	101	107	148	138	133
	NM	33	34	36	41	41	42
25,000	Min	10	10	11	13	13	13
	Lb	147	154	161	244	230	221
	NM	60	62	65	79	79	79
35,000	Min	13	14	14	18	18	18
	Lb	209	214	221	358	338	325
	NM	89	92	95	121	121	122
37,000	Min	14	15	15	19	19	19
	Lb	222	227	233	382	361	346
	NM	95	97	101	130	130	130
39,000	Min	15	15	16	20	20	20
	Lb	236	240	245	407	384	367
	NM	100	103	106	138	138	139
41,000	Min	15	16	16	21	21	21
	Lb	250	252	256	432	406	388
	NM	106	109	112	147	147	148
43,000	Min	16	17	17	22	22	22
	Lb	265	265	268	460	430	409
	NM	112	115	118	155	155	156
45,000	Min	17	17	18	23	23	23
	Lb	282	280	280	488	456	431
	NM	117	120	123	164	164	165
47,000	Min	17	18	18	24	24	24
	Lb	299	295	293	508	482	454
	NM	123	126	129	170	172	173
49,000	Min	18	19	19	24	25	25
	Lb	313	311	307	521	498	477
	NM	127	131	135	174	178	181

* Based on descending to sea level.

RESERVE FUEL

RESERVE FUEL ALLOWANCES

Based on 4 Passengers, ISA, Zero Wind

VFR Fuel Reserves (at 15,000 feet)

Day (30 minutes)	680 lb
Night (45 minutes)	1,030 lb

IFR Fuel Reserves (Alternate plus 45 minutes at 15,000 feet)

100 Nautical Mile Alternate	1,628 lb
200 Nautical Mile Alternate	2,054 lb
300 Nautical Mile Alternate	2,404 lb

NBAA IFR Reserves *

100 Nautical Mile Alternate	1,461 lb
200 Nautical Mile Alternate	1,883 lb
300 Nautical Mile Alternate	2,227 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 & Fuel Flow								
Weight (lb)	KIAS	----- Pressure Altitude (ft) -----						
		S.L.	5,000	10,000	15,000	20,000	25,000	30,000
30,000	180	1,567	1,478	1,407	1,357	1,311	1,268	1,227
28,000	175	1,495	1,404	1,333	1,283	1,237	1,197	1,156
26,000	170	1,425	1,333	1,261	1,210	1,164	1,127	1,087
24,000	165	1,357	1,265	1,191	1,140	1,093	1,055	1,018
22,000	160	1,289	1,198	1,125	1,072	1,025	985	950

LANDING PERFORMANCE

LANDING DISTANCE - ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Full, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = Sea Level									
Ambient Temp	-----			Landing Weight (lb) -----					
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000	
0 / 32	3,280	3,180	3,070	2,910	2,730	2,650	2,560	2,490	
10 / 50	3,360	3,270	3,150	2,980	2,800	2,710	2,620	2,550	
15 / 59	3,400	3,310	3,190	3,020	2,840	2,750	2,660	2,580	
20 / 68	3,470	3,350	3,230	3,060	2,870	2,780	2,690	2,610	
25 / 77	3,530	3,390	3,270	3,100	2,910	2,810	2,720	2,640	
30 / 86	3,590	3,430	3,310	3,130	2,940	2,850	2,750	2,670	
35 / 95	3,650	3,480	3,350	3,170	2,980	2,880	2,780	2,710	
40 / 104	3,720	3,530	3,390	3,210	3,010	2,910	2,820	2,740	
45 / 113	3,780	3,590	3,430	3,240	3,040	2,950	2,850	2,770	
50 / 122	3,850	3,650	3,470	3,280	3,080	2,980	2,880	2,800	
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)	131	129	125	121	115	113	110	108	

Elevation = 1,000 Feet									
Ambient Temp	-----			Landing Weight (lb) -----					
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000	
0 / 32	3,360	3,260	3,150	2,980	2,800	2,710	2,620	2,550	
10 / 50	3,470	3,350	3,230	3,060	2,870	2,780	2,690	2,610	
15 / 59	3,530	3,390	3,270	3,100	2,910	2,810	2,720	2,650	
20 / 68	3,590	3,430	3,310	3,130	2,940	2,850	2,750	2,680	
25 / 77	3,660	3,480	3,350	3,170	2,980	2,880	2,790	2,710	
30 / 86	3,730	3,540	3,390	3,210	3,010	2,920	2,820	2,740	
35 / 95	3,800	3,610	3,430	3,250	3,050	2,950	2,850	2,770	
40 / 104	3,870	3,670	3,470	3,290	3,090	2,980	2,890	2,800	
45 / 113	3,940	3,730	3,510	3,320	3,120	3,020	2,920	2,840	
50 / 122	4,010	3,800	3,560	3,360	3,160	3,050	2,950	2,870	
Lndg Wght Temp Limits °C/°F	50/122	52/126	52/126	52/126	52/126	52/126	52/126	52/126	
V _{REF} (KIAS)	132	129	126	121	115	113	110	108	

LANDING PERFORMANCE

LANDING DISTANCE - ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Full, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 2,000 Feet								
Ambient Temp	-----				Landing Weight (lb) -----			
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000
0 / 32	3,460	3,350	3,230	3,060	2,870	2,780	2,690	2,600
10 / 50	3,600	3,440	3,310	3,130	2,940	2,850	2,750	2,670
15 / 59	3,660	3,490	3,350	3,170	2,980	2,880	2,790	2,700
20 / 68	3,730	3,550	3,400	3,210	3,020	2,920	2,820	2,730
25 / 77	3,810	3,610	3,440	3,250	3,050	2,950	2,860	2,770
30 / 86	3,880	3,680	3,480	3,290	3,090	2,990	2,890	2,800
35 / 95	3,950	3,740	3,520	3,330	3,130	3,020	2,920	2,830
40 / 104	4,030	3,810	3,570	3,370	3,160	3,060	2,960	2,870
45 / 113	4,110	3,880	3,630	3,410	3,200	3,090	2,990	2,900
50 / 122	—	—	3,690	3,450	3,230	3,130	3,020	2,930
Lndg Wght Temp Limits °C/°F	47/117	49/120	50/122	50/122	50/122	50/122	50/122	50/122
V _{REF} (KIAS)	132	129	126	121	115	113	110	108

Elevation = 3,000 Feet								
Ambient Temp	-----				Landing Weight (lb) -----			
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000
-10 / 14	3,460	3,340	3,220	3,050	2,870	2,770	2,680	2,600
0 / 32	3,590	3,430	3,310	3,130	2,940	2,850	2,750	2,670
10 / 50	3,740	3,550	3,400	3,210	3,020	2,920	2,820	2,730
15 / 59	3,810	3,620	3,440	3,250	3,060	2,960	2,860	2,770
20 / 68	3,890	3,680	3,480	3,300	3,090	2,990	2,890	2,800
25 / 77	3,960	3,750	3,530	3,340	3,130	3,030	2,930	2,840
30 / 86	4,040	3,820	3,580	3,380	3,170	3,060	2,960	2,870
35 / 95	4,120	3,890	3,640	3,420	3,210	3,100	3,000	2,900
40 / 104	4,210	3,970	3,710	3,460	3,240	3,140	3,030	2,940
45 / 113	—	4,040	3,770	3,500	3,280	3,170	3,070	2,970
Lndg Wght Temp Limits °C/°F	43/109	45/113	48/118	48/118	48/118	48/118	48/118	48/118
V _{REF} (KIAS)	132	129	126	121	116	113	110	108

LANDING PERFORMANCE

LANDING DISTANCE - ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Full, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 4,000 Feet									
Ambient Temp	-----			Landing Weight (lb) -----					
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000	
-10 / 14	3,590	3,430	3,310	3,130	2,940	2,840	2,750	2,660	
0 / 32	3,740	3,550	3,400	3,210	3,020	2,920	2,820	2,730	
10 / 50	3,890	3,690	3,490	3,300	3,090	2,990	2,890	2,800	
15 / 59	3,970	3,760	3,530	3,340	3,130	3,030	2,930	2,840	
20 / 68	4,050	3,830	3,590	3,380	3,170	3,070	2,970	2,870	
25 / 77	4,140	3,910	3,650	3,420	3,210	3,110	3,000	2,910	
30 / 86	4,220	3,980	3,720	3,460	3,250	3,140	3,040	2,940	
35 / 95	4,310	4,060	3,780	3,500	3,290	3,180	3,070	2,970	
40 / 104	—	4,140	3,850	3,550	3,330	3,220	3,110	3,010	
45 / 113	—	—	—	3,590	3,360	3,250	3,140	3,040	
Lndg Wght Temp Limits °C/°F	39/102	41/106	44/111	46/115	46/115	46/115	46/115	46/115	
V _{REF} (KIAS)	132	129	126	121	116	113	110	108	

Elevation = 5,000 Feet									
Ambient Temp	-----			Landing Weight (lb) -----					
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000	
-10 / 14	3,730	3,540	3,390	3,210	3,010	2,910	2,820	2,730	
0 / 32	3,890	3,690	3,480	3,300	3,090	2,990	2,890	2,810	
5 / 41	3,970	3,760	3,530	3,340	3,130	3,030	2,930	2,840	
10 / 50	4,060	3,840	3,590	3,380	3,170	3,070	2,970	2,880	
15 / 59	4,140	3,910	3,660	3,430	3,210	3,110	3,000	2,910	
20 / 68	4,230	3,990	3,730	3,470	3,250	3,150	3,040	2,950	
25 / 77	4,330	4,070	3,800	3,510	3,290	3,190	3,080	2,980	
30 / 86	4,420	4,150	3,860	3,550	3,330	3,220	3,110	3,020	
35 / 95	4,520	4,240	3,940	3,590	3,370	3,260	3,150	3,050	
40 / 104	—	—	4,010	3,640	3,410	3,300	3,190	3,090	
Lndg Wght Temp Limits °C/°F	36/97	38/100	41/106	44/111	44/111	44/111	44/111	44/111	
V _{REF} (KIAS)	132	129	126	121	116	113	111	108	

LANDING PERFORMANCE

LANDING DISTANCE - ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Full, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 6000 Feet									
Ambient Temp	-----			Landing Weight (lb) -----					
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000	
-10 / 14	3,880	3,680	3,480	3,290	3,090	2,990	2,890	2,790	
0 / 32	4,060	3,840	3,590	3,380	3,170	3,070	2,970	2,870	
5 / 41	4,150	3,920	3,660	3,430	3,220	3,110	3,000	2,900	
10 / 50	4,240	4,000	3,730	3,470	3,260	3,150	3,040	2,940	
15 / 59	4,330	4,080	3,800	3,520	3,300	3,190	3,080	2,980	
20 / 68	4,430	4,170	3,880	3,560	3,340	3,230	3,120	3,010	
25 / 77	4,530	4,250	3,950	3,600	3,380	3,270	3,160	3,050	
30 / 86	4,640	4,340	4,030	3,650	3,420	3,310	3,200	3,080	
35 / 95	—	4,430	4,100	3,690	3,460	3,350	3,230	3,120	
40 / 104	—	—	4,180	3,740	3,500	3,390	3,270	3,160	
Lndg Wght Temp Limits °C/°F	34/93	36/97	40/104	42/108	42/108	42/108	42/108	42/108	
V _{REF} (KIAS)	132	129	126	121	116	113	111	108	

Elevation = 7000 Feet									
Ambient Temp	-----			Landing Weight (lb) -----					
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000	
-20 / -4	3,870	3,670	3,470	3,290	3,080	2,980	2,880	2,790	
-10 / 14	4,050	3,830	3,590	3,380	3,170	3,070	2,960	2,860	
0 / 32	4,240	4,000	3,730	3,470	3,260	3,150	3,040	2,940	
5 / 41	4,340	4,080	3,810	3,520	3,300	3,190	3,080	2,980	
10 / 50	4,440	4,170	3,880	3,560	3,340	3,230	3,120	3,010	
15 / 59	4,550	4,260	3,960	3,610	3,380	3,270	3,160	3,050	
20 / 68	4,650	4,360	4,040	3,650	3,430	3,310	3,200	3,090	
25 / 77	4,770	4,450	4,120	3,700	3,470	3,350	3,240	3,130	
30 / 86	4,880	4,550	4,200	3,760	3,510	3,390	3,280	3,160	
35 / 95	—	4,650	4,290	3,820	3,550	3,430	3,320	3,200	
Lndg Wght Temp Limits °C/°F	33/91	36/97	39/102	39/102	39/102	39/102	39/102	39/102	
V _{REF} (KIAS)	132	130	126	121	116	113	111	108	

LANDING PERFORMANCE

LANDING DISTANCE - ACTUAL

(Distance from 50 Feet Above the Runway)

Flaps Full, Dry Runway, Zero Wind, Anti-Ice On or Off

Elevation = 8,000 Feet									
Ambient Temp	Landing Weight (lb)								
°C / °F	31,800	31,000	30,000	28,000	26,000	25,000	24,000	23,000	
-20 / -4	4,040	3,820	3,580	3,370	3,170	3,060	2,960	2,860	
-10 / 14	4,230	3,990	3,730	3,470	3,250	3,150	3,040	2,940	
0 / 32	4,440	4,170	3,890	3,560	3,340	3,230	3,120	3,020	
5 / 41	4,550	4,270	3,970	3,610	3,390	3,270	3,160	3,050	
10 / 50	4,660	4,370	4,050	3,660	3,430	3,320	3,200	3,090	
15 / 59	4,780	4,470	4,130	3,710	3,470	3,360	3,240	3,130	
20 / 68	4,900	4,570	4,220	3,770	3,520	3,400	3,280	3,170	
25 / 77	5,030	4,670	4,300	3,840	3,560	3,440	3,330	3,210	
30 / 86	5,160	4,780	4,390	3,900	3,600	3,480	3,360	3,250	
35 / 95	—	4,890	4,490	3,970	3,650	3,520	3,400	3,280	
Lndg Wght Temp Limits °C/°F	32/90	35/95	37/99	37/99	37/99	37/99	37/99	37/99	
V _{REF} (KIAS)	132	130	126	121	116	114	111	108	

STALL SPEEDS

Zero Angle of Bank, Landing Gear Up or Down, KCAS

Stall Speeds				
Weight (lb)	Flap Position			
	Full	15°	5°	Up
36,100	109	114	120	123
34,000	106	111	116	120
32,000	101	105	112	115
30,000	96	101	107	110
28,000	92	97	103	106
26,000	88	93	99	102
24,000	84	89	94	97
22,000	80	85	90	93

MISSION PLANNING

CRITERIA

The following mission planning table provides flight time and fuel burn statistics for selected distances and 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 200 pounds of fuel included in all fuel burn figures. NBAA IFR fuel reserves (200 nm) are considered in each case but are not included in the fuel burn figure.

The mission planning table reflects the climb schedule of 300 knots / M 0.80, high speed cruise, and high speed descent 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:

<u>Distance (nm)</u>	<u>Typical Cruise Altitude (ft)</u>
0 - 100	5,000 - 13,000
101 - 200	12,000 - 23,000
201 - 300	22,000 - 29,000
301 - 500	28,000 - 37,000
501 - 1000	36,000 - 43,000
1001 +	41,000 - 49,000

Wind Correction Factors *									
True Airspeed (kt)	Headwinds (kt)					Tailwinds (kt)			
	100	75	50	25	0	25	50	75	100
420	1.31	1.22	1.13	1.06	1.00	0.94	0.89	0.85	0.81
440	1.29	1.21	1.13	1.06	1.00	0.95	0.90	0.85	0.81
460	1.28	1.19	1.12	1.06	1.00	0.95	0.90	0.86	0.82
480	1.26	1.18	1.12	1.05	1.00	0.95	0.91	0.86	0.83
500	1.25	1.18	1.11	1.05	1.00	0.95	0.91	0.87	0.83
520	1.24	1.17	1.11	1.05	1.00	0.95	0.91	0.87	0.84

* Wind Correction Factor is calculated as KTAS divided by the sum of $KTAS \pm$ wind component

MISSION PLANNING

FLIGHT TIME & FUEL BURN

Dist (nm)	----- Cruise Altitude (ft) -----									
	15,000		25,000		35,000		37,000		39,000	
	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)
100	0:17	916								
200	0:31	1,683	0:29	1,427	0:29	1,284	0:29	1,262	0:29	1,240
300	0:45	2,451	0:41	2,065	0:40	1,847	0:40	1,797	0:40	1,725
400	0:59	3,220	0:53	2,704	0:52	2,411	0:52	2,332	0:52	2,209
500	1:12	3,990	1:05	3,345	1:03	2,974	1:03	2,867	1:03	2,693
600	1:26	4,762	1:17	3,986	1:15	3,537	1:15	3,402	1:15	3,178
800	1:54	6,309	1:41	5,271	1:38	4,665	1:38	4,474	1:38	4,149
1,000	2:23	7,863	2:06	6,566	2:01	5,794	2:01	5,547	2:02	5,122
1,200	2:50	9,425	2:30	7,863	2:24	6,925	2:24	6,621	2:25	6,098
1,400	3:19	10990	2:55	9,162	2:47	8,058	2:48	7,697	2:48	7,075
1,600			3:19	10464	3:10	9,191	3:10	8,776	3:12	8,054
1,800					3:33	10319	3:34	9,858	3:35	9,034
2,000							3:57	10941	3:59	10016
2,200	Assumptions: • 300 KIAS / M 0.80 climb • High speed cruise • High speed descent • ISA, zero winds enroute • Flight time includes climb, cruise and descent • Fuel burn includes 200 pounds for taxi and takeoff • Four passengers @ 200 pounds each, two crew • NBAA IFR Reserves - 200 nm (1,883 lb) Reserves are not included in the fuel burn figures									
2,400										
2,600										
2,800										
3,000										

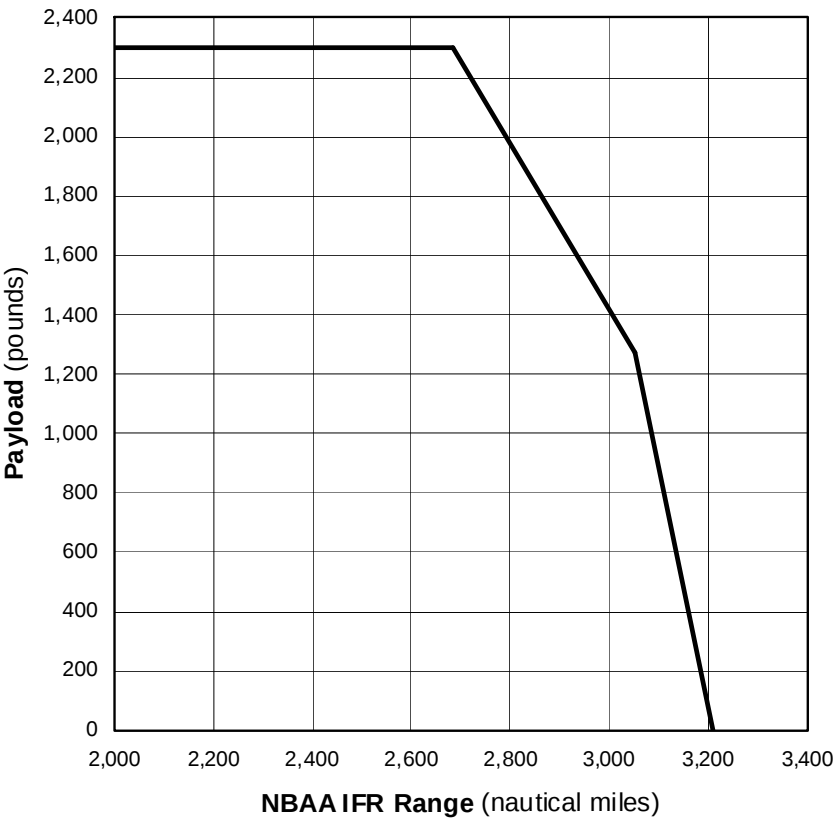
FOR SELECTED DISTANCES

Cruise Altitude (ft)										
41,000		43,000		45,000		47,000		49,000		Dist (nm)
Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	Time (min)	Fuel (lb)	
										100
0:29	1,223									200
0:41	1,663	0:41	1,621	0:41	1,593	0:42	1,577			300
0:52	2,103	0:53	2,021	0:53	1,959	0:54	1,912	0:55	1,890	400
1:04	2,543	1:05	2,421	1:05	2,325	1:06	2,246	1:07	2,199	500
1:16	2,983	1:17	2,824	1:17	2,692	1:18	2,582	1:19	2,508	600
1:39	3,865	1:40	3,630	1:41	3,427	1:42	3,258	1:43	3,184	800
2:03	4,750	2:03	4,438	2:05	4,165	2:06	3,935	2:08	3,862	1,000
2:26	5,637	2:27	5,248	2:29	4,905	2:31	4,616	2:32	4,542	1,200
2:50	6,529	2:51	6,059	2:53	5,647	2:56	5,298	2:57	5,224	1,400
3:14	7,424	3:15	6,873	3:17	6,393	3:20	5,995	3:22	5,915	1,600
3:37	8,318	3:39	7,691	3:41	7,143	3:44	6,743	3:46	6,663	1,800
4:01	9,213	4:03	8,513	4:06	7,898	4:09	7,494	4:10	7,413	2,000
4:24	10114	4:27	9,336	4:30	8,656	4:33	8,252	4:34	8,171	2,200
4:48	11017	4:51	10163	4:55	9,415	4:58	9,013	4:59	8,931	2,400
		5:16	10994	5:19	10244	5:22	9,807	5:23	9,718	2,600
						5:46	10638	5:48	10548	2,800
								* 6:28	10639	3,000

* Mach 0.82 Cruise

MISSION PLANNING

RANGE / PAYLOAD CAPABILITY
NBAA IFR Reserves (200 nm), ISA,
Zero Wind, Mach 0.82 Cruise



Assumptions:
Step climb to FL 490



Citation Marketing Cessna Aircraft Company, P.O. Box 7706, Wichita, Kansas
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