

EMB 145 and CRJ-200
Design Specification

Purpose: Competitive alternative to Embraer EMB-145 and Bombardier CRJ-200

Payload: 50 passengers at 175 lb. each plus 30 lb. of baggage each

Crew: 2 pilots at 175 lb. each plus baggage at 30 lb. each
2 cabin attendants at 130 lb. each plus baggage at 30 lb. each

Range: 1600 n.mi.

Reserve fuel: FAR Part 121 Reserves

Cruise Altitude: 30,000 ft.

Cruise Speed: Mach number = 0.74

Climb: Direct to 30,000 ft. at maximum takeoff weight

Takeoff Field Length: 5,000 ft. at sea level, standard day, at maximum takeoff weight

Landing Field Length: 4,500 ft. at sea level, standard day, at maximum landing weight

Powerplants: 2 Turbofans

Pressurization: 5,000 foot cabin altitude at 30,000 ft.

Certification Basis: FAR Part 25

Mission Profile: FAR Part 121 Domestic Operations (see document "Mission Profiles")