
APPENDIX C

SENSOR STANDARDS

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C.1 Runway Visual Range Standards. Table C-1 lists the required accuracy in feet for runway visual range sensors.

Table C-1. Accuracy for Runway Visual Range

Runway Visual Range In Feet	Accuracy
<1,300 feet	±30 feet
1,300 through 2,600 feet	±80 feet
>2,600 feet	±10%

C.2 Visibility Sensor Standards. Table C-2 lists the accuracy for automated visibility sensors.

Table C-2. Accuracy of Automated Visibility Sensors

Visibility from Standard Visibility Sensor	Percentage of Data Within or Exceeding Given Range		
	At least 80% Within	No more than 18% Exceed	No more than 2% Exceed
0 through 1 1/4	± 1/4	± 1/2	± 1
1 1/2 through 1 3/4	+ 1/4, - 1/2	+ 1/2, - 3/4	± 1
2 through 2 1/2	± 1/2	± 1	± 1
3	+ 1/2, - 1	± 1	± 1
4 through 10	± 1 RV*	± 2 RV*	± 2 RV*
*RV = Reportable value, all other values in miles.			

C.3 Wind Sensor Standards. Table C-3 lists the units of measure, the range, the accuracy, and the resolution for pressure parameters.

Table C-3. Units of Measure, Range, Accuracy and Resolution of Wind Parameters

Parameter	Units of Measure	Range	Accuracy	Resolution
Direction	Degrees	1° to 360°	±5° when speed is ≤5 knots	10°
Speed	Knots	2 to 90 knots	±1 knot up to 10 knots ±10% above 10 knots	1 knot

C.4 Sky Condition Standards. Table C-4 lists the range and accuracy for sky condition parameters.

Table C-4. Range and Accuracy of Sky Condition Parameters

Parameter	Range	Accuracy	
		Amounts	Heights
Sky Condition	0 - 12,000 ft. (minimum)	±1 Reportable Value	±3 Reportable Values

C.5 Temperature and Dew Point Parameter Standards. Table C-5 lists the range, accuracy, and resolution in degrees Celsius for temperature and dew point parameters.

Table C-5. Temperature and Dew Point Sensor Accuracy and Resolution (C°)

Parameter	Range	Accuracy	Resolution
Temperature	-62 to -50	±1.1	0.1
	-50 to +50	±0.6	0.1
	+50 to +54	±1.1	0.1
Dew point	-34 to -24	±2.2	0.1
	-24 to -01	±1.7	0.1
	-01 to +30	±1.1	0.1

C.6 Pressure Parameter Standards. Table C-6 lists the units of measure, the range, the accuracy, and the resolution for pressure parameters.

Table C-6. Units of Measure, Range, Accuracy and Resolution of Pressure Parameters

Parameter	Units of Measure	Range	Accuracy	Resolution
Station Pressure	Inches of Mercury	4	±0.02	0.005 inch
Altimeter Setting	Inches of Mercury	4	±0.02	0.01 inch
Sea-Level Pressure	Hectopascals	136	±0.68	0.1 hectopascal