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## **APPENDIX C**

### **SENSOR STANDARDS**

## SENSOR STANDARDS

**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

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**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**

<b>Parameter</b>	<b>Units of Measure</b>	<b>Range</b>	<b>Accuracy</b>	<b>Resolution</b>
Station Pressure	Inches of Mercury	4	$\pm 0.02$	0.005 inch
Altimeter Setting	Inches of Mercury	4	$\pm 0.02$	0.01 inch
Sea-Level Pressure	Hectopascals	136	$\pm 0.68$	0.1 hectopascal