

RECOMMENDATION ITU-R SM.1269

CLASSIFICATION OF DIRECTION FINDING BEARINGS

(Question ITU-R 28/1)

(1997)

The ITU Radiocommunication Assembly,

considering

- a) that direction finding measurements have great significance in the investigation of harmful interference and efficient use of the radio spectrum;
- b) that knowledge of the accuracy of a bearing is important in determining the most likely position of an emission;
- c) that knowledge of the accuracy of a bearing will also be useful to the international monitoring system;
- d) that many modern automatic direction finders rely on statistical averaging to classify bearings for fix purposes,

recommends

- 1 that Tables 1 and 2 be used when deciding and classifying the accuracy that should be ascribed to the measurement of a bearing;
- 2 that the accuracy of the bearing is indicated by appending the appropriate letter from the tables to the numerical value of the bearing;
- 3 that administrations provide statistical data to support assigning numerical averaging values to the observational characteristics, e.g. standard deviation, number of samples, actual error, mean average of the sample.

TABLE 1

Classifications of bearings of frequencies below 30 MHz

Class	Bearing error (degrees)	Observational characteristics					
		Signal strength	Bearing indication	Fading	Interference	Bearing swing (degrees)	Duration of observation
A	± 2	Very good or good	Definite	Negligible	Negligible	≤ 3	Adequate
B	± 5	Fairly good	Bearing fluctuation	Slight	Slight	> 3 ≤ 5	Short
C	± 10	Weak	Severely fluctuating bearing	Strong	Strong	> 5 ≤ 10	Very short
D	$> \pm 10$	Scarcely perceptible	Ill-defined	Very strong	Very strong	> 10	Inadequate

Class A: probability of less than 5% that error exceeds 2° .

Class B: probability of less than 5% that error exceeds 5° .

Class C: probability of less than 5% that error exceeds 10° .

Class D: bearing with an error greater than those in Class C.

NOTE 1 – For more explanation of the Classification of Bearing see Chapter 3.6 of the Spectrum Monitoring Handbook (1995).

TABLE 2

Classifications of bearings of frequencies above 30 MHz

Class	Bearing error (degrees)	Observational characteristics				
		Signal strength	Bearing indication	Interference	Bearing swing (degrees)	Duration of observation
A	± 1	Very good or good	Definite	Negligible	≤ 1	Adequate
B	± 2	Fairly good	Bearing fluctuation	Slight	> 1 ≤ 3	Short
C	± 5	Weak	Severely fluctuating bearing	Strong	> 3 ≤ 5	Very short
D	$\geq \pm 5$	Scarcely perceptible	Ill-defined	Very strong	> 5	Inadequate

Class A: probability of less than 5% that error exceeds 1° .

Class B: probability of less than 5% that error exceeds 2° .

Class C: probability of less than 5% that error exceeds 5° .

Class D: bearing with an error greater than those in Class C.

NOTE 1 – For more explanation of the Classification of Bearing see Chapter 3.6 of the Spectrum Monitoring Handbook (1995).