1. THE COSMIC MICROWAVE BACKGROUND RADIATION.

In fact, detection of radiation required the construction of an elaborate but small radio horn, which was designed to make measurements with unprecedented accuracy. The original horn that was used was [1] _____ at Bell Laboratories in Holmdel, New Jersey, [2] _____ satellite communications. In 1965, radio astronomers Arno Penzias [3] _____ Robert Wilson made a series of measurements [4] _____ this radio telescope. They found an [5] _____ radio noise that seemed to be [6] _____ of the direction of the antenna [7] _____
pointing. After trying very hard to [8] _____ their telescope and to eliminate the [9] _____ of a terrestrial origin for the [10] _____ signal, they concluded that the radiation [11] _____ uniform in all directions. The radiation [12] _____ not more intense in the direction [13] _____ the Sun or of the Milky Way, [14] _____ example, so it cloud not be [15] _____ solar or galactic origin.

Answers

In fact, detection of radiation required the construction of an elaborate but small radio horn, which was designed to make measurements with unprecedented accuracy. The original horn that was used was developed at Bell Laboratories in Holmdel, New Jersey, for satellite communications. In 19865, radio astronomers Arno Penzias and Robert Wilson made a series of measurements with this radio telescope. They found an excess radio noise that seemed to be independent of the direction of the antenna was pointing. After trying very hard to calibrate their telescope and to eliminate the possibility of a terrestrial origin for the radio signal, they concluded that the radiation was uniform in all directions. The radiation was not more intense in the direction of the Sun or of the Milky Way, for example, so it cloud not be of solar or galactic origin.