used to provide the balance of the required coverage where the proportional sector is less than ±40 degrees.

(2) Vertically in the runway region between:

(i) A horizontal surface 2.5 meters (8 feet) above the farthest point of runway centerline which is in line of sight of the azimuth antenna, and,

(ii) A conical surface originating at the azimuth ground equipment antenna inclined at 20 degrees above the horizontal up to a height of 600 meters (2000 feet).

(3) Vertically in the back azimuth region between:

(i) A conical surface originating 2.5 meters (8 feet) above the runway stop end, included at 0.9 degree above the horizontal, and,

(ii) A conical surface orginating at the missed approach azimuth ground equipment antenna, inclined at 15 degrees above the horizontal up to a height of 1500 meters (5000 feet).

(iii) Where obstacles penetrate the lower coverage limits, coverage need be provided only to minimum line of sight.

(4) Within the back azimuth coverage sector defined in paragraph (q) (1), (2), and (3) of this section the power densities must not be less than those shown in Table 9, but the equipment design must also allow for:

(i) Transmitter power degradation from normal −1.5 dB.

(ii) Rain loss of −2.2 dB at the longitudinal coverage extremes.

(h) *Back azimuth siting.* The back azimuth equipment antenna must:

(1) Normally be located on the extension of the runway centerline at the threshold end;

(2) Be adjusted so that the vertical plane containing the zero degree course line contains the back azimuth reference datum;

(3) Have minimum height necessary to comply with the course requirements prescribed in paragraph (g) of this section;

(4) Be located at a distance from the threshold end that is consistent with safe obstruction clearance practices;

(5) Not obscure any light of an approach lighting system; and

(6) Be installed on frangible mounts or beyond the 300 meter (1000 feet) light bar.

(i) *Back azimuth antenna coordinates.* The scanning beams transmitted by the back azimuth equipment may be either conical or planar.

(j) *Back azimuth accuracy.* The requirements specified in §171.313(e) apply except that the reference point is the back azimuth reference datum.

(k) *Back azimuth antenna characteristics.* The requirements specified in §171.313(f) apply.

(l) *Scanning conventions.* Figure 12 shows the approach azimuth and back azimuth scanning conventions.