



RADref-p2b

Radar reflector for coastal powerboats

RADref-p2b comes with a tilting bracket which makes this model especially appropriate for powerboats. It offers a compact lightweight design by using 40 pieces of aluminium arranged at 90° and staggered at 45° which provides a radar cross section of 2 m^2 .

The reflector is made of ABS- and PVC plastics and marine grade aluminium while the tilting bracket is made of glass reinforced nylon 30% glass filled. Due to the rugged design and the materials used, this reflector is in top quality and has less chance of chafing to the sails and rigging compared to similar products.

The best performance is achieved when mounting the radar reflector on the coach roof, a targa or a tunatower in a vertical position as high as possible above the deck. There are 3 holes for fasteners on the mounting bracket. In order to not block the radar signal, it is important to avoid mounting the reflector in the shadow of sails and other equipment on board e.g. antennas.

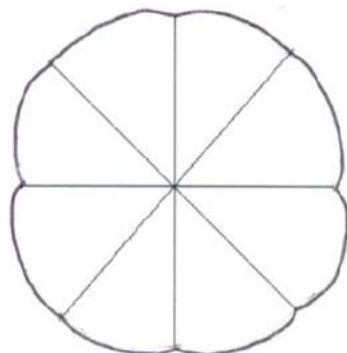
Mechanical Specification:

Material	Aluminium, nylon, ABS- and PVC plastics
Dimensions	$\varnothing 50$ - $\varnothing 585$ mm
Height (m/ft)	0.55/1.80
Weight	0.48kg (1.05 lbs)
The foot (cm/ft)	12x8/1.5/0.40x0.26/0.05
Mounting method	In the coach roof, a targa or a tunatower
Radar cross section	2 m^2

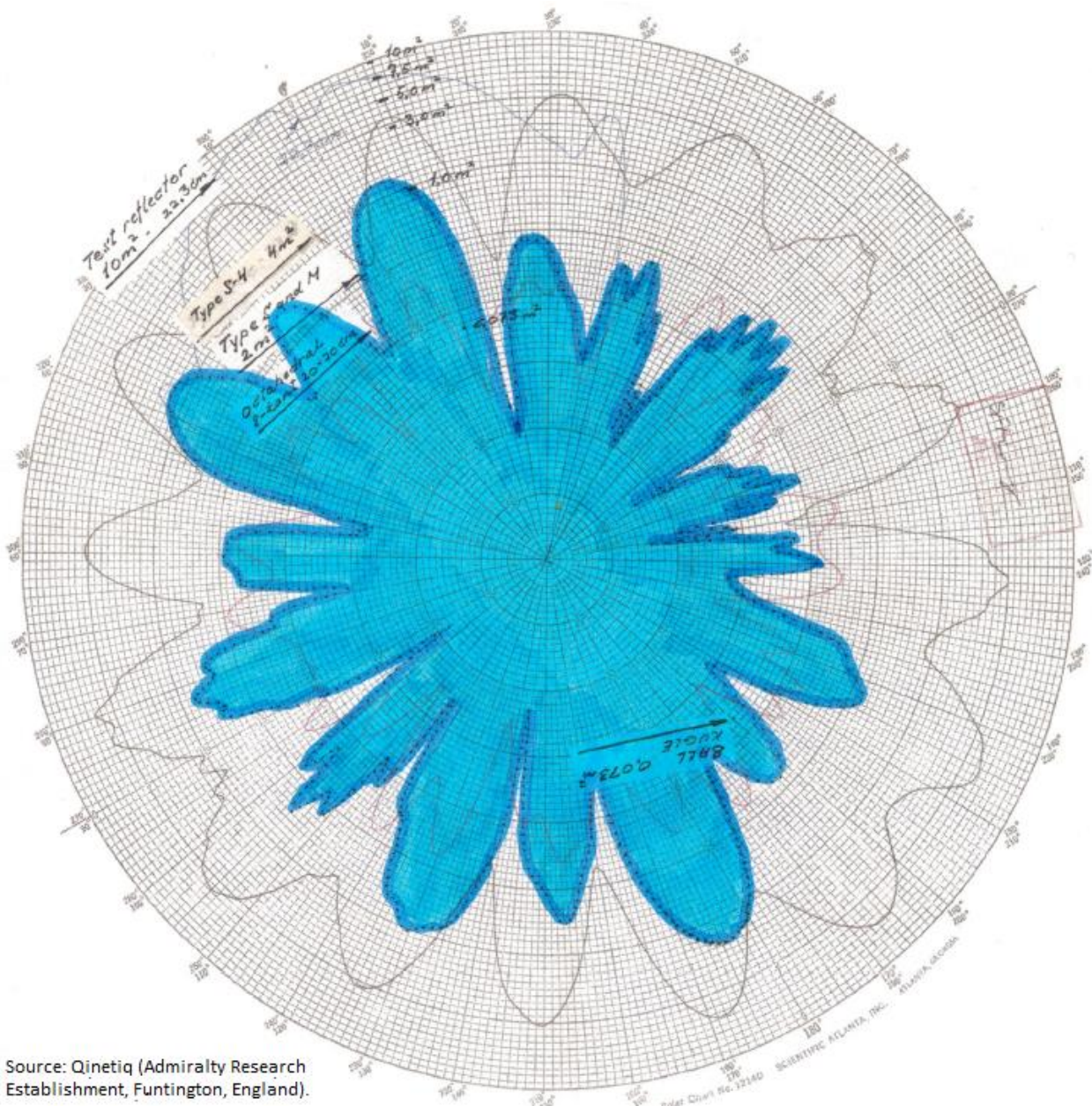


Principles of the AC Marine radar reflector construction

The AC Marine radar reflector is constructed as a multi reflector build by many dihedral reflectors. Radar reflector S2 and p2 reflect in eight different directions. This construction ensures the most effective reflection of electromagnetic radar signals which is due to the many angles covered as well as the compact size of the reflector.



The above illustrates the radar reflector's 8 bigger peeks which enable full reflections in 8 different directions and 360° full coverage.



Source: Qinetiq (Admiralty Research Establishment, Funtington, England).

The AC Marine radar reflectors have been tested in terms of radar cross section and the 360° full coverage by the Admiralty Research Establishment in England, today known as a part of the British company, Qinetiq. As the above diagram shows, the radar reflector has 16 peaks, whereof 8 of these are bigger peaks which ensure full reflection in these 8 directions. The reflector gives one peak for every 22.5°, which ensures 360° full coverage. Furthermore, the diagram illustrates that the AC Marine radar reflector S2 and P2 have a radar cross section of 2m².