



RADref-s4b

Radar reflector for offshore sailboats

RADref-s4 offers the greatest reflective capacity by using 28 pieces of aluminium arranged at 90° and staggered at 22,5° which provides a radar cross section of 4 m².

The reflector is made of ABS- and PVC plastics and marine grade aluminium. 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.

In order to achieve the best performance, the radar reflector should be mounted in the rigging away from the mast in a vertical position at least 4 meters/13 ft. above the deck. In order to not block the radar signal, it is important to avoid mounting the reflector in the shadow of the sails or other equipment on board e.g. antennas. We recommend using durable lashing materials when attaching the reflector to the rigging.

For larger sailboats we recommend using two reflectors to ensure full visibility.

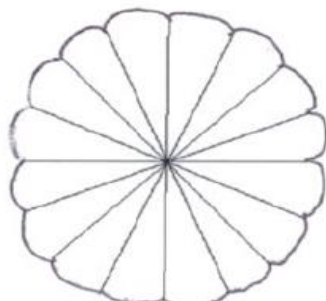
Mechanical Specification:

Material	Aluminium, ABS- and PVC plastics
Dimensions	Ø100-Ø590mm
Height (m/ft)	0.60/1.90
Weight	0.88kg (1.95 lbs)
Mounting method	In the rigging
Radar cross section	4 m ²

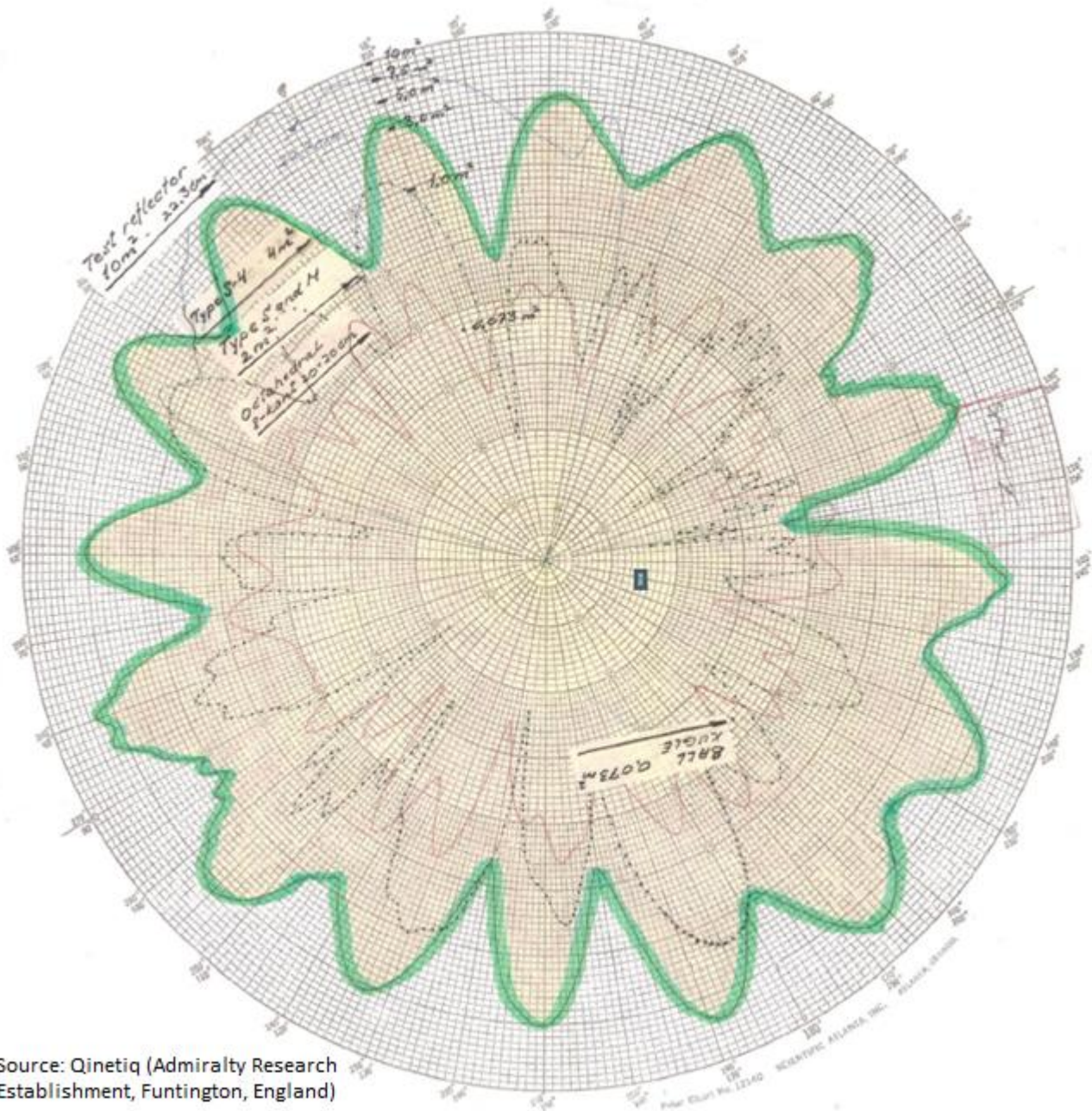


Principles of the AC Marine radar reflector construction

The AC Marine radar reflector s4 is constructed by seven rectangular sections turned 22.5 degree from each other, which enable reflections in 16 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 16 peaks which enable reflections in 16 different directions with 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, one for every 22.5°, which ensures 360° full coverage. Likewise it shows that the AC Marine radar reflector S4 and P4 have a radar cross section of 4m².