

# UV Weathering Colour Test Results to International Standards

by certified independent testing agency

ISO 4892-3:2016 ISO 7724-2:1984 ISO 7724-3:1984

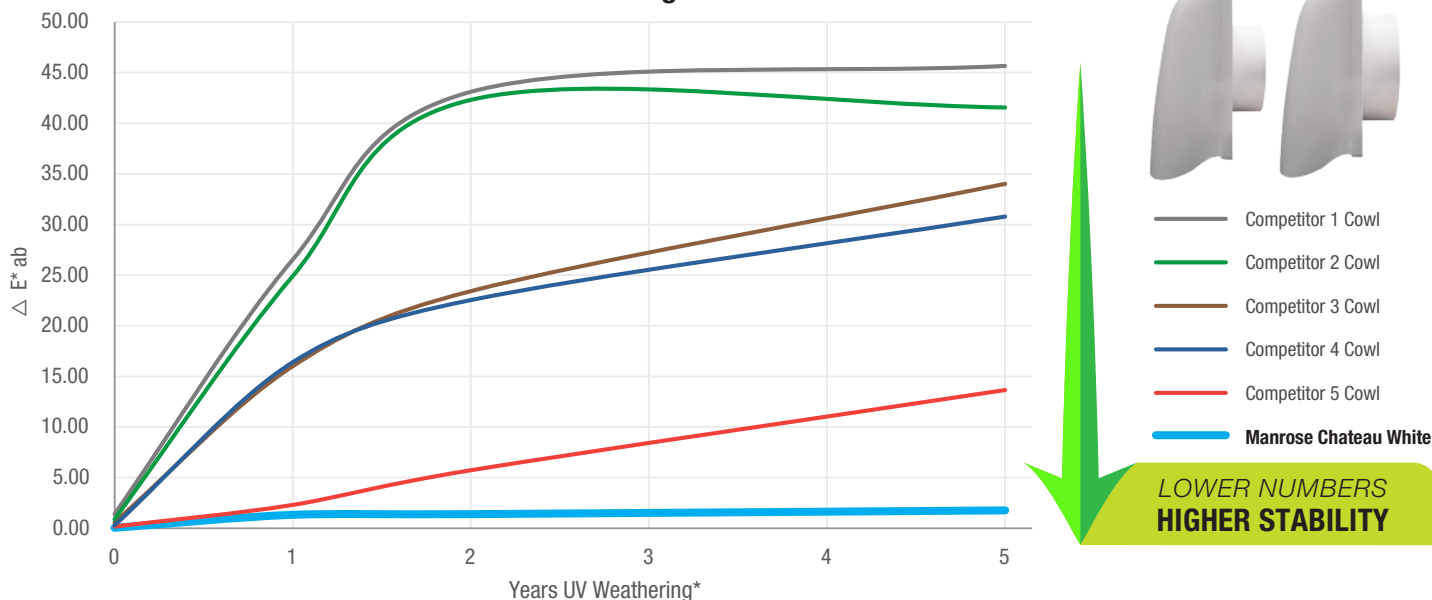
**MANROSE®**

CHATEAU WEATHERPROOF COWL

125mm White - DCT0302

150mm White - DCT0304

Colour Change ISO 7724-3



LOWER NUMBERS  
HIGHER STABILITY

UV Weathering Colour test results		
	Age (years)	Colour Change ISO 7724-3 $\Delta E^* ab$
Manrose Chateau White	0	0.03
	1	1.31
	2	1.38
	5	1.75
Competitor 1 Cowl	0	1.40
	1	26.52
	2	43.10
	5	45.66
Competitor 2 Cowl	0	0.88
	1	24.89
	2	42.31
	5	41.56
Competitor 3 Cowl	0	0.60
	1	16.00
	2	23.42
	5	34.01
Competitor 4 Cowl	0	0.27
	1	16.38
	2	22.52
	5	30.77
Competitor 5 Cowl	0	0.15
	1	2.29
	2	5.72
	5	13.65



The colour difference of Competitor 1 Cowl over a period of 0 to 5 years.

## Summary:

The **Manrose Chateau Weatherproof cowl** has been designed and developed in NZ to deliver superior performance in every aspect of its functionality. A critical feature is the breakthrough special material that delivers outstanding UV weathering performance which resists yellowing and embrittlement significantly better than major local competitors.

To prove Chateau Cowl UV stability, samples from competitor's white cowls were analysed by a specialist third-party testing agency using international accelerated UV weathering testing standards.

\*The accelerated UV weathering hours has been chosen to simulate 1, 2 and 5 years worth of UV weathering. The yearly exposure hours and intensity is derived from the monthly UV index averages over a year.

## Observations:

The Manrose Chateau Cowl in white did not have any visible yellowing and performed up to **27 times** better than major competitors at the 5 year mark.

$\Delta E^* ab$  is a scale from 0 to 100 that is an objective measure of the difference in two colours.

Delta_E	Perception
$\leq 1.0$	Not perceptible to the human eye
1 - 2	Perceptible through close observation
2 - 10	Perceptible at a glance
11+	Increasingly noticeable discolouration