



2.4mR SPARS

Kim Williams, V2, 2008

Mast Dimensions

MAST	Proctor Lambda	Blackspar	Superspar M9	Goldspar 50mm
Head to hounds	1270	1085	1120	1050
Hounds to spreader	650	680	700	660

NOTES:

The measurement from the head was from the bottom of the mark.
All mast measured 4650mm between marks

Mast Deflections

MAST	Proctor Lambda	Blackspar	Superspar M9	Goldspar 50mm
Fore & Aft @ Hounds	15	29	26	35
Fore & Aft @ Centre	26	41	32	46
Fore & Aft @ Spreaders	23	36	27	41
Athwartships Hounds	17	47	32	50
Athwartships Centre	25	60	51	67
Athwartships Spreaders	21	51	47	59

NOTES:

Masts were supported at the head and tack marks and a 15kg weight was applied at the centre between marks.

Mast Tip Deflections

MAST	Proctor Lambda	Blackspar	Superspar M9	Goldspar 50mm
Side	52	85	70	91
Fore & Aft	31	59	44	66

NOTES:

Masts were held at the bottom mark, supported at the hounds and had 15kg applied at the head mark

Kim Williams comments

It looks to me that the "blackspar" is by far and a way the most flexible with the "Goldspar" a close second, my observation was that the "Goldspar" also tended to bend more from the spreaders than the others where as the "blackspar" had an even bend its entire length. The "Proctor Lambda" was incredibly stiff and the "Superspar" was also even in bend like the "blackspar".

Michael Leydon comments

Thanks Kim for putting the figures together.

My impressions of watching the 'Tip' bend measurements are as follows.

- Proctor Lambda - minimal all the way through, very stiff.
- Blackspar - minimal at spreaders, the tip bent all the way though increasing as it neared the top.
- Superspar M9 - minimal at spreaders with a consistent even curve in the tip unlike the Blackspar that increased its bend as it got closer to the top.
- Goldspar 50mm – most of the bend is through the whole mast concentrating in the centre. I felt that there was very minimal tip bend, it was just the natural curve created by the mast bending in the centre (this is why I stopped using this mast as I was unable to maintain leach tension down hill by pulling the vang on as the mast just bent in the middle, flattening the main, causing the leach to stay/fall open.