

Table (4.2) the result of the calculations of the torque on blade

r_m m	λ_r	C	U	ϕ	V_r^2	$\frac{1}{2} \times \rho \times C \times \frac{S}{3}$	C_L	C_D	L N	D N	F_D N	$F_D \times r_m$ Nm
1.00	0.67	0.585	2.90	57.2	28.66	0.1441	0.68	0.08	5.135	1.625	3.436	3.436
2.4262	1.20	0.585	5.22	40.764	47.50	6.8458	0.65	0.09	8.135	1.828	3.927	7.068
2.60	1.73	0.585	7.33	30.88	77.102	11.1125	0.60	0.094	12.189	1.910	4.607	11.978
The blade torque= $\sum F_D \times r_m$												22.482