



ROSS POULTRY LIGHTING FOR BROILER BREEDERS



Objective:

Provide the correct lighting program to achieve 5% production at 161 days (23 weeks) of age in closed (controlled environment) rearing housing.

Key points:

1. From 1-6 days of age, the light intensity in brooding should be 80-100 lux.
2. 7-9 days light intensity in brooding area is reduced to 30-60 lux.
3. Provide a constant short day length (8/9 hours) from 10 days of age. Use a step-down program to reduce day length from 23 hours at placement to 8/9 hours at 10 days of age.
4. If 10-day body weights are low, longer day lengths can be provided but a constant 8/9-hour day length at the latest must be achieved by 21 days of age.
5. Light intensity during rear should be between 10-20 lux.
6. Light must be distributed uniformly in the house (i.e. no dark areas in the house).
7. Broiler breeders need about 19 weeks of short days (8/9 hour light) to become fully photo responsive.
8. Broiler breeders should be photo stimulated between 20-22 weeks. Increase day length to at least 11/12 hours to ensure stimulation. There is no benefit to be gained from exceeding a day length of 14 hours in controlled environment housing.
9. White light is recommended. Ultraviolet or color light gives no benefit in lay period.
10. A single increase in day length gives similar egg production to a step-up program; abrupt increases in day length give higher rate of lay, step-up programs result in better persistency of lay.
11. For open house rearing and laying please refer to the Parent Stock Manual.

Table 1. Recommended lighting program to achieve 5% production at 23 weeks.

Age		Hours of light (CV% at 133 days)		Light intensity
Days	Weeks	10% or less	10% or more	Lux
1		23	23	80-100 lux in brooding area 10-20 lux in house
2		23	23	
3		19	19	
4		16	16	
5		14	14	
6		12	12	
7		11	11	
8		10	10	
9		9	9	
10-146*		8/9	8/9	10-20 lux
147-154	21	11/12	8/9	60 lux target 30-60 lux in house
154-161	22	12	12	
161-168	23	13**	12	
168-175	24	13	13**	
175-182	25	13	13	

WE WOULD LOVE TO HEAR FROM YOU - PLEASE EMAIL US at Andre.Human@rpb.co.za



WORLD'S NO.1 BROILER BRAND