

Question	Marking Guidance	Mark	Comments
08.1	<ol style="list-style-type: none"> 1. Oxygen produced in light-dependent reaction; 2. The faster (oxygen) is produced, the faster the light-dependent reaction; 	2	
08.2	35–36 ($\mu\text{mol O}_2 \text{ mg}^{-1}$);;	2	Correct difference at 500 $\mu\text{mol photons m}^{-2} \text{ s}^{-1}$ or incorrect difference but division by 4 shown = 1 mark
08.3	<p>At all light intensities, chloroplasts from mutant plants:</p> <ol style="list-style-type: none"> 1. Have faster production of ATP and reduced NADP; 2. (So) have faster/more light-independent reaction; 3. (So) produce more sugars that can be used in respiration; 4. (So) have more energy for growth; 5. Have faster/more synthesis of new organic materials; 	4 max	Accept converse points if clear answer relates to non-mutant plants