	T .	
Question	Answer	Mark
Number		
11	Use of $I = \frac{L}{4\pi d^2}$ (1)	
	$d = 8.1 \times 10^{16} \mathrm{m} \tag{1}$	2
	Example of calculation	
	$d = \sqrt{\frac{L}{4\pi I}} = \sqrt{\frac{8.94 \times 10^{27} \text{ W}}{4\pi \times 1.09 \times 10^{-7} \text{ W m}^{-2}}} = 8.08 \times 10^{16} \text{ m}$	
	Total for question 11	2