Commentary on the performance of Candidate B, Level 1, Functional Mathematics

Aspect		Mark		Comment
RC	Identify and obtain necessary information to tackle the problem	2	a	The candidate has correctly identified the wattage of the conventional bulbs that are used in the flat.
RF	Understand practical problems in familiar and unfamiliar contexts and situations	2	b	The candidate identifies the ranges of bulbs that could be used to replace the conventional bulbs listed in part a.
AI	Examine patterns and relationships as values are changed.	1	c	The conventional bulbs are replaced but there is no justification for the choice. A range of bulbs is indicated and there is no obvious choice of minimum wattage. However, the mean of the range is later used in the calculation, without explanation.
RT	Select mathematics in an organised way to find solutions to practical problems for different purposes	1	c	A method requiring totalling the wattage of the conventional bulbs is mentioned but not made explicit. In part the working is shown on the planning sheet, where 600W is seen.
RI	Make an initial model and decide how to apply methods in an organised way	2	c	The method of calculating the energy saving (subtracting the two totals) is stated but not shown explicitly.
AT	Apply mathematics in an organised way to find solutions to practical problems for different purposes	2	c	The method is correctly applied with the evidence partly on the planning sheet (using the mean wattages) and on the answer space for part c.
II	Interpret and communicate solutions to practical problems, giving explanations	1	c	A commentary is given regarding the working but the reasons for decisions are not supplied and the layout of the work is somewhat haphazard.
IT	Draw simple conclusions.	2	c	The “correct” conclusion has been drawn and the values calculated have been used to do this. (Clearly the problem of the range of bulbs has been dealt with in some way and by using average values. The idea that specific wattages within these ranges should be bought has not been understood.
	Total	13		

In preparing the mark scheme we have found evidence within the structure of the expected answer to say that the aspects have been met. The marks have been allocated to these aspects.

It may be that the aspects will be met at other points in a different solution. If this is the case OCR will take steps to allocate these marks where evidence exists.