

NIE Energy Commercial LED Lighting Offer: Quality Standard

Each applicant should propose to use an LED product that meets the criteria below. At least two of these must be met exactly or exceeded.

- 40 lm/W
- Ra 75 – Colour rendering
- Up to 4,000K – Colour appearance
- 35,000 hour (L70)

Where two criteria fall below the stated criteria the allowance should be no less than:

- 35 lm/W
- Ra 70 – Colour rendering
- Up to 4,200k – Colour appearance
- 35,000 hour (L70)

For Example:

40 lm/W	Ok ✓	43 lm/W	Ok ✓
Ra > 70	Ok ✓	Ra 52	Not high enough x
3,000K	Ok ✓	4,200K	Ok ✓
50,000 Hours (L70)	Ok ✓	35,000 Hours (L70)	Ok ✓

What is 'L70'?

The term 'L70' is used to describe the LED's expected light output over its stated life span. 'L70' means that at the defined life time (hours) the LED product will emit a minimum of 70% of its initial light output.

i.e. 'L70' @ 35,000hours only 70% of the initial lumens will be provided.

This is the approved method for measuring lumen maintenance of LED light sources as issued by the Illuminating Engineering Society (IES).

Why does this matter?

If a scheme is designed without understanding or taking into consideration an 'L70' standard, the scheme may be under lit and subsequently not compliant with building regulations or your requirements.