

## Branded Retail Store –Complete LED Lighting

*One for one replacement of 35w MH lamps with 20W LED Spotlight and 50w Halogen downlight with 6w MasterLED (Philips GU10) LED lamps using a 4000k & 3000k CCT mix- Narrow and medium beam- Retail Store*

### 65% ENERGY SAVINGS

#### Details:

Store designed using LED, to achieve Energy cost savings as well as reduce heat load on air conditioning units of Shopping Mall. Single semi recessed LED Spots (20w) replace Metal Halide fittings (35w) and recessed single fitting-Halogen downlights (50w) replaced with MasterLED 6w GU10 LED down lights.

Mix of 4000k and 3000k Colour temperature used on light sources to enhance the CRI with a mix of Narrow and medium beam angles;

Client Brief: Light (Lux) levels were not to be compromised in the Retail store when replacing Metal Halide and Halogen lamps with LED solution- > than 55% savings to be achieved in this Retail application. Specific connected load needed to be reduced to meet landlord's specifications.

#### Benefits:

**Large energy savings:** Instant >65% energy savings

**Reduced Maintenance costs:** the lamp life increases from 4000 hrs to 40 000hrs resulting in reduced disturbances to high traffic retail area.

**Low heat production:** Low heat emissions help to reduce air conditioning consumption

**Specific connected load:** Achieved <28w/m<sup>2</sup> specific connected load; beating landlords required shop fitting design specifications

**CO<sup>2</sup> Emissions:** Reduced CO<sup>2</sup> emissions by approximately 2.9 tonnes per year from this retail trading floor

**<22 month payback / >65% reduction in power/ 2.9 tonnes annual CO<sup>2</sup> savings *equiv***