
Planning Lighting Spill Assessment

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Checked by:	-	Client:	ÆRIANCE Investment
Purpose of issue:	Information	Revision:	-

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1.0 Introduction

This document has been produced to determine the light spill that may affect the building adjacent on Back Hill Road.

GPDE Ltd have run the calculation for all external lighting that has been specified on the balconies for the residential units at Herbal House.



2.0 Calculations and Results

As can be seen from the calculation screen shots below. The Eav (average illuminance) on the closest occupied residential property is circa 0.70lux with a high of 1.42lux and a low of 0.09lux.

Figure 1: Summary of calculation grid

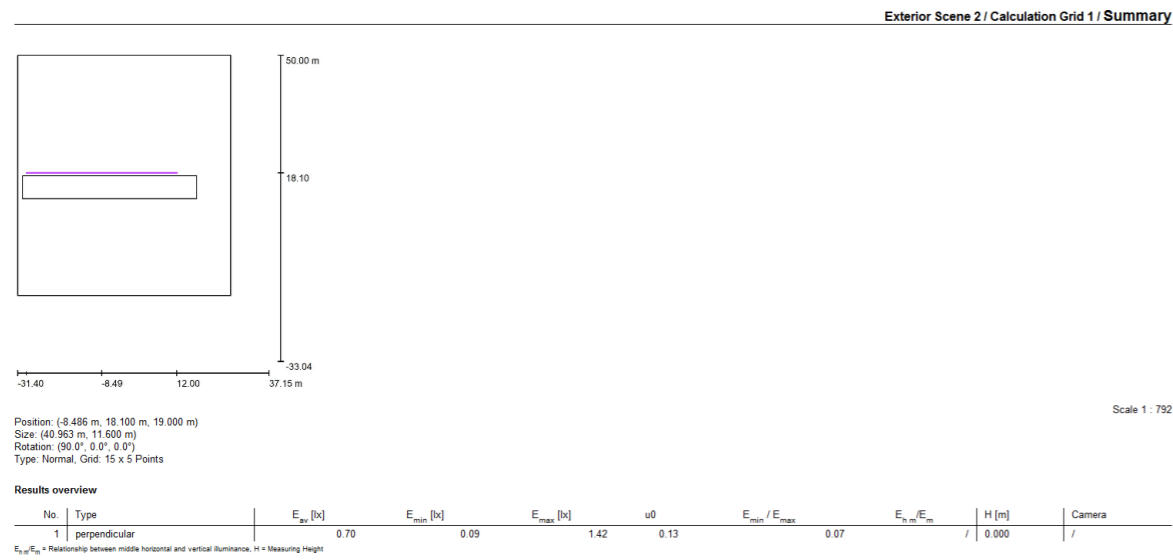


Figure 2: Visualisation of external lighting scheme

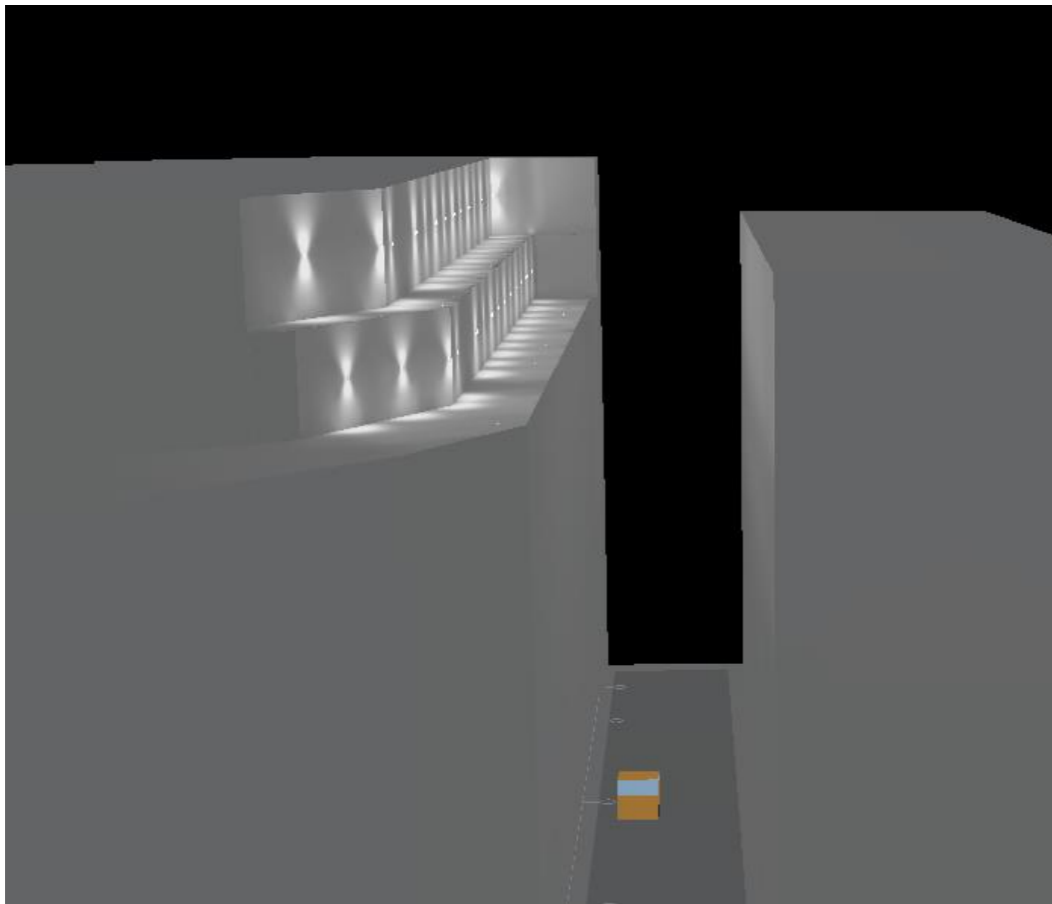
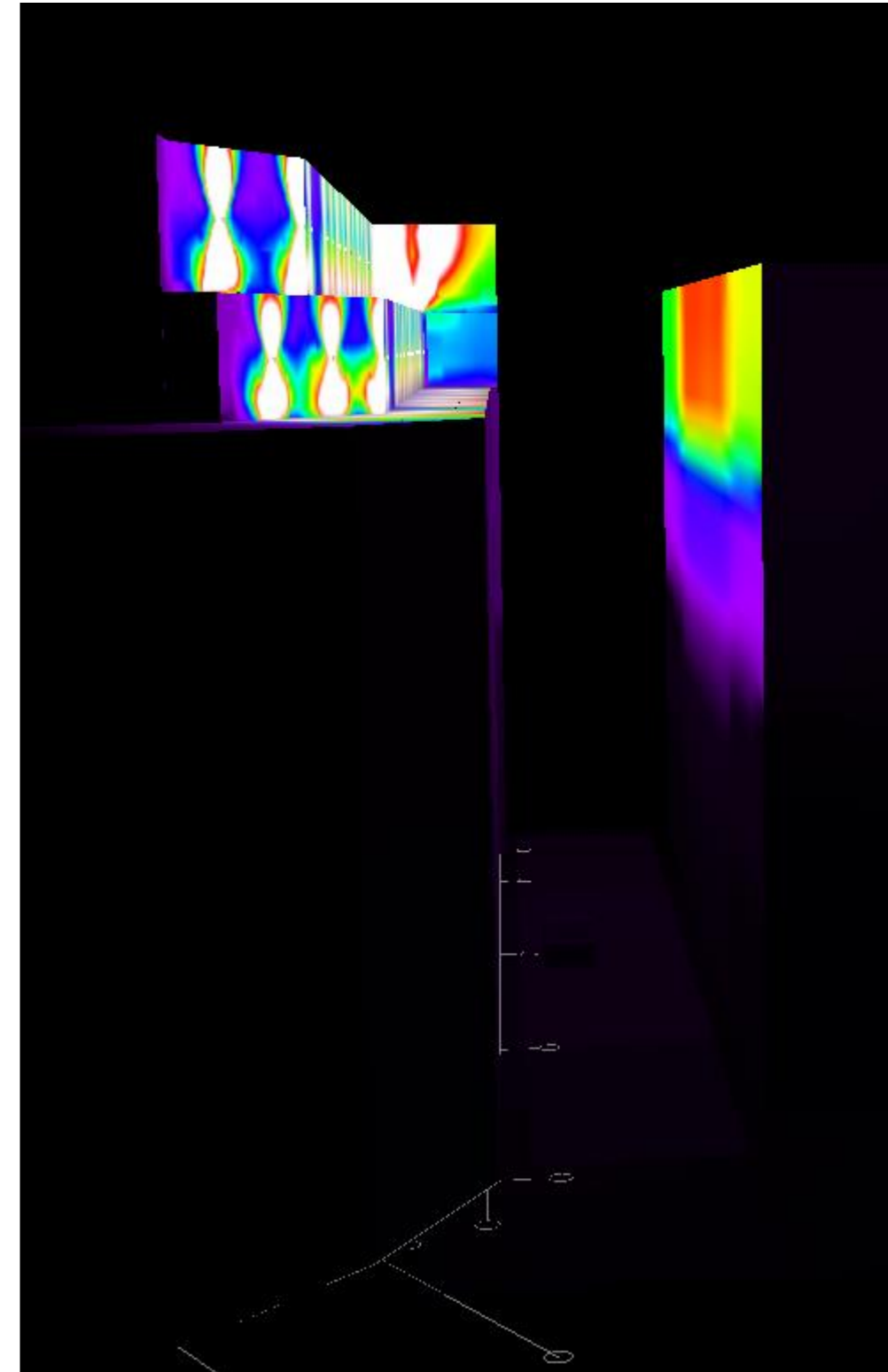


Figure 3: Visualisation of false colour rendering of external lighting scheme



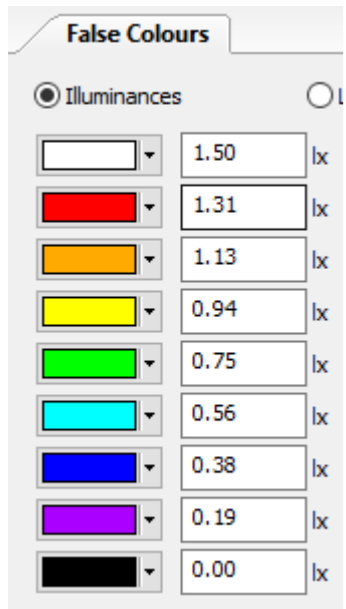


Figure 4: Beam orientation of fittings

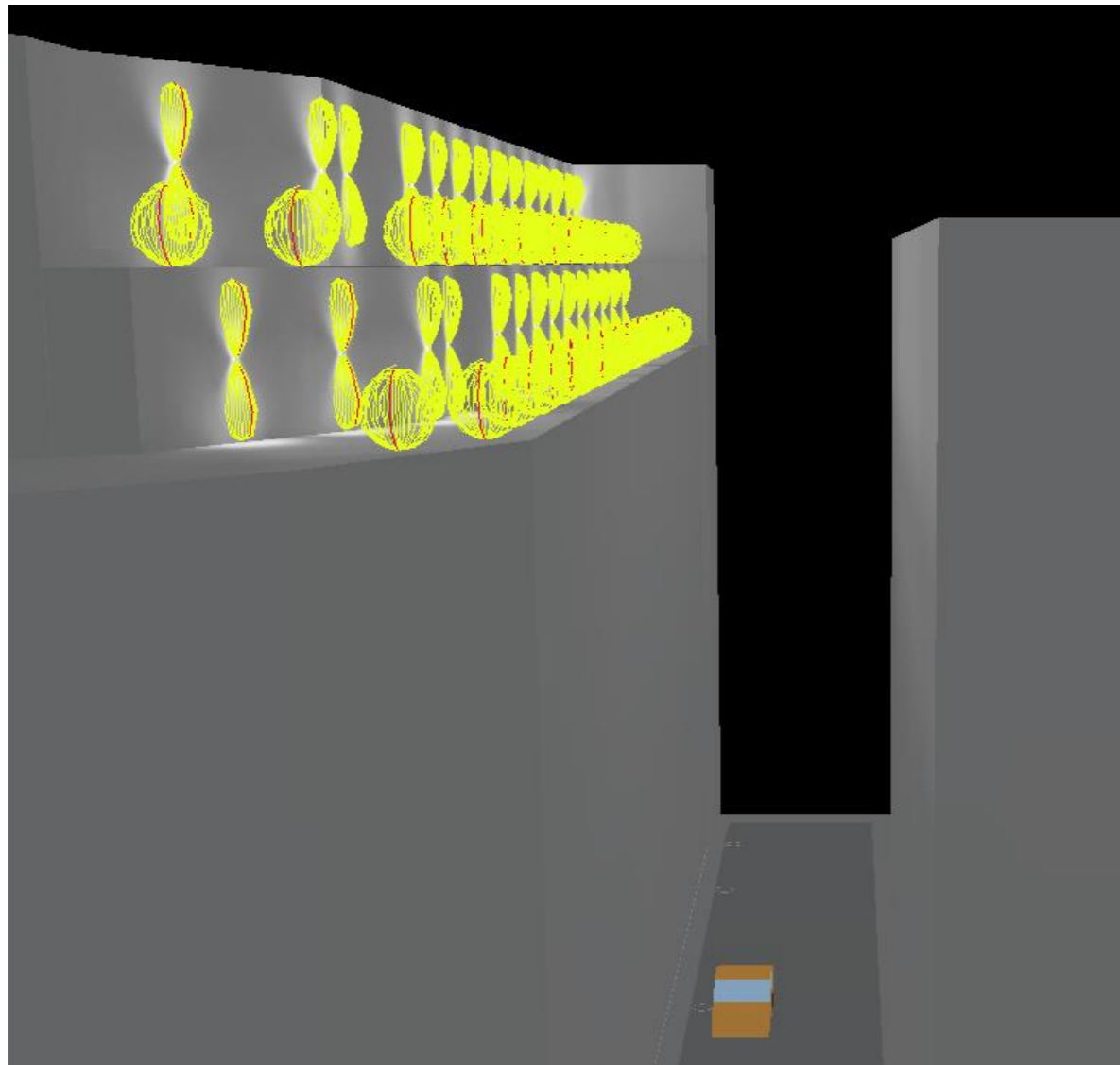
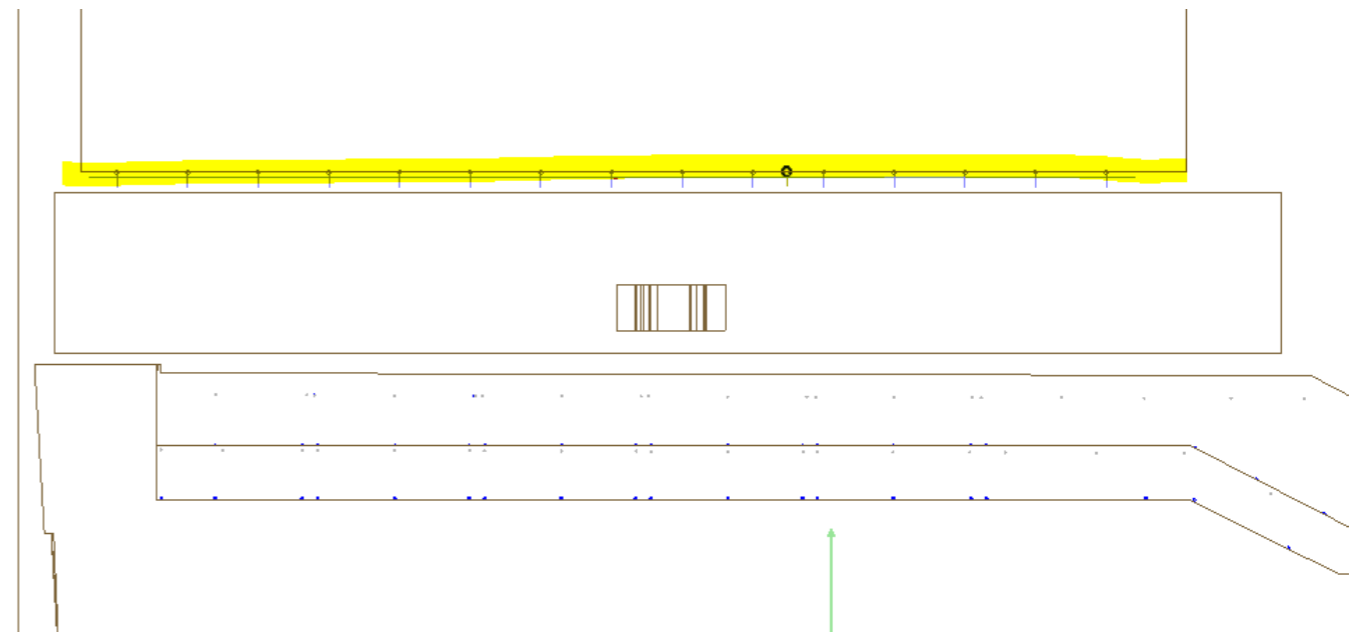


Figure 5: Location of calculation zone (highlighted in yellow)



3.0 Details of Fittings

The below is a brief description of fittings that have been utilised to complete the calculations above.

Type K – uplighter, iGuzzini Ledplus (changed from Tender unit – Flos A Round)

Ledplus

Design iGuzzini iGuzzini

Last information update: June 2018

Ledplus all glass - 60 x 60

Product code
2620

Technical description
Wall/floor recessed lighting fitting flush with the surface designed for white one-colour LED light sources with safety low voltage (insulation Class III) for the production of signalling light. The square body is 60x60 mm. It is made of high-resistance thermoplastic material with extraclear sodium-line surface glass with no visible screws. The stainless-steel lower ring is fixed to the diffusing glass. The whole assembly is supported by four AISI304 stainless-steel turned fixing elements. The fitting is fixed to the outer casing by means of special retention springs for anchoring purposes. A stainless-steel top collar flush with the surface is fixed to the outer casing. In order to wire the product an M14x1 A2-stainless-steel cable and an outgoing power-supply cord (L = 300 mm) type H05RNLF 2x1 mm² are used. The cable is equipped with an anti-transpiration device (IP67 Patented) made up of a resin-coated gasket located along the power-supply cord. Two different types of outer casings are available for installation. They can be ordered separately from the optical assembly and come complete with closing plug. You can choose between a diecast-aluminium barrel-shaped outer casing for wall/floor installation and a plastic cylindrical outer casing for wall/floor installation. Easy installation and perfect flush application are ensured by two different types of adapters made of polypropylene thermoplastic material for barrel-shaped or cylindrical outer casings respectively. The fitting permits creating preset light scenes by means of the control device Effect Equalizer. The unit made up of glass, optical assembly and outer casing ensures resistance to 500-kg static load with protection degree IP68 IK08. Maximum glass surface temperature is lower than 40°C.

Installation
The product is fixed to the outer casing by special locking springs and is pulled out by means of a suction cup without any other tools. The fitting can be easily inspected and it makes the replacement of the LED circuit or the introduction of accessories possible. It can be recessed into the wall or floor by an installation outer casing.

Dimension (mm)
60x60x82

Colour
Indeterminate (00)

Weight (Kg)
0.25

Mounting
wall recessed/ground recessed

Wiring
Available ballasts: traditional, for DIN bar (1-10W, 20-30W, 60-120W), water-tight resin-coated. To be ordered separately. The product comes complete with an outgoing power-supply cord (L = 300 mm) H05RNLF 2x1 mm² type and an electronic plate with LED 24V DC.

Notes
Fitting complete with lamp. Green and amber colours available upon request.

Complies with EN60598-1 and pertinent regulations

III

IK08

IP68

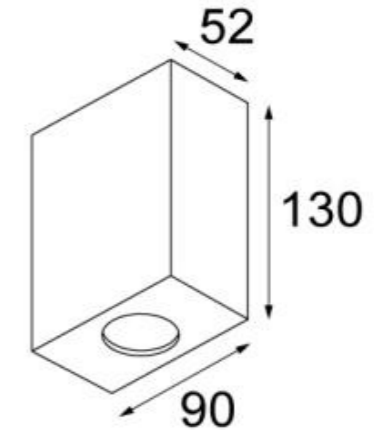
Product configuration: 2620

Product characteristics

Total lighting output [Lm]: 2	Total luminous flux at or above an angle of 90° [Lm]: 0
Total power [W]: 0.7	Emergency luminous flux [Lm]: /
Luminous efficacy [Lm/W]: 2.4	Voltage [V]: 24
Life Time: 50,000h - L70 - B20 (Ta 25°C)	Ambient temperature range: from -20°C to +35°C.
Number of optical assemblies: 1	

Type J – wall light, Modular Sulfer (in black)

SULFER



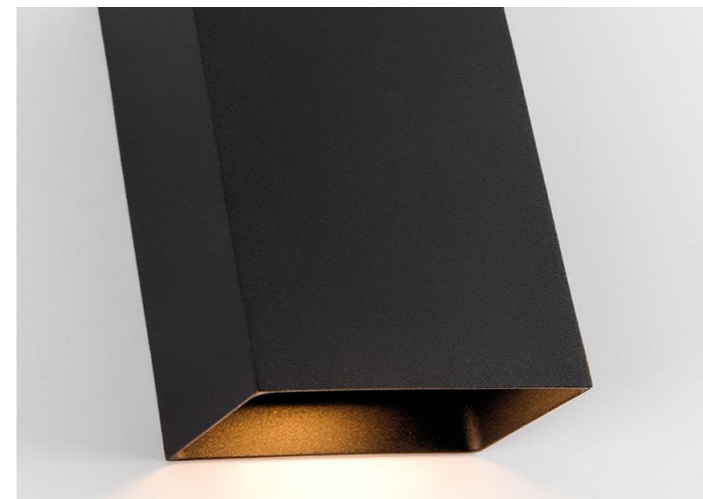
SULFER LED IP54 GI

Sulfer is a minimalist square-shaped fixture. The cast aluminium luminaire brings a modern accent to walls, whether in- or outside (IP54) homes, hotels, restaurants, etc. By default, Sulfer diffuses a wide beam (flood), yet the fixture comes optionally with additional beam angle plates (medium and small) to let you customize the beam. Since the diffuser is recessed into the casing, Sulfer shines indirect light, ensuring you will never be blinded by its beam.

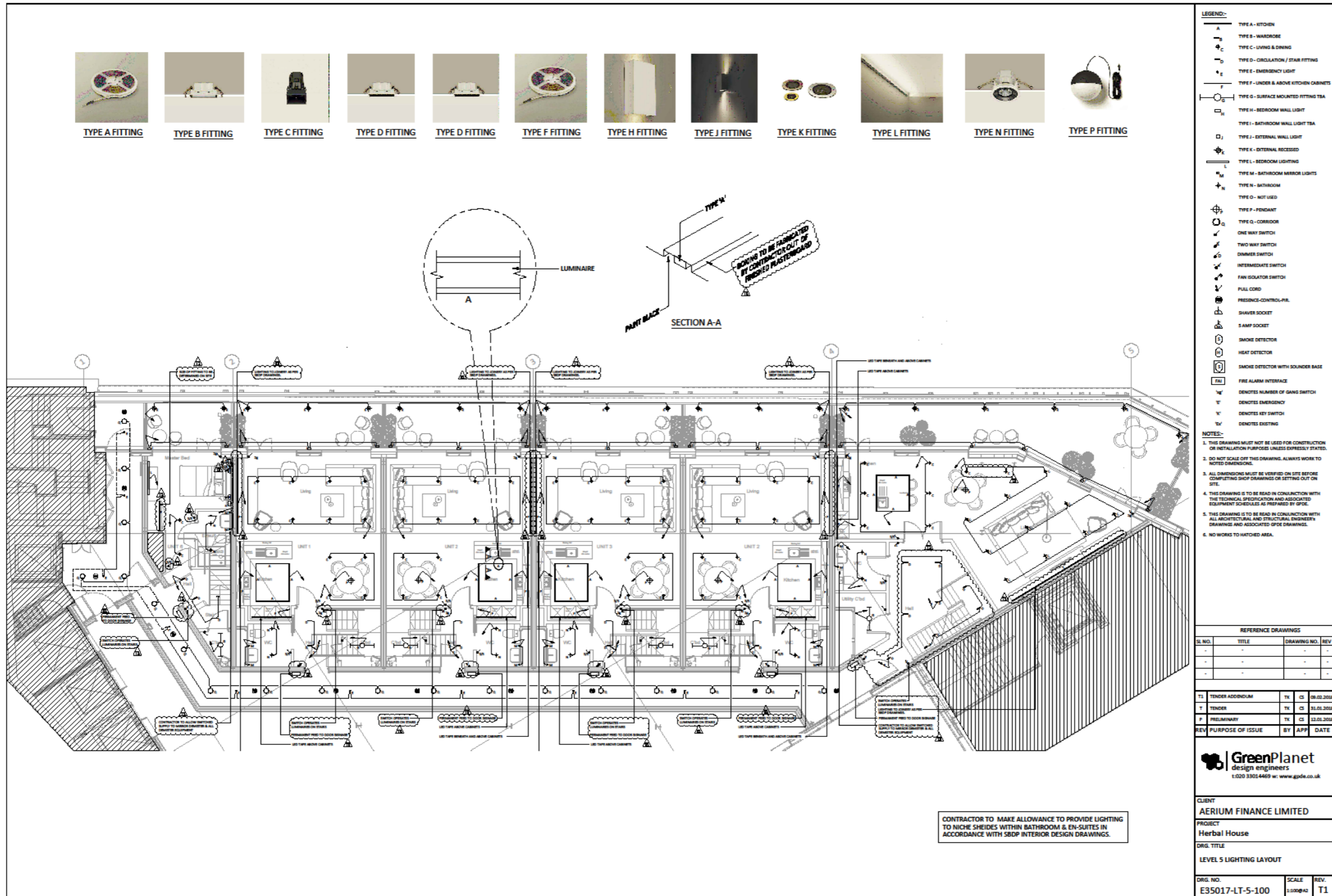
Art. Nr. 13270232

SPECIFICATIONS

Lamp	2x LED Module 3W
Gear / Transfo	LED gear incl.
Weight	
Min. Distance	0.1 m
Power supply	230V
IP	IP54
Glow Wire Test	960°
Lifetime	L80 B20 @ 50.000 hrs
CRI	90
Lumen	284 Lm
Efficacy	36 Lm/W
UGR	12.1
Adjustability	Not Applicable



4.0 Appendix 1 – Level 5 lighting layout



5.0 Appendix 2 – Level 6 lighting layout

