

**In The Name Of Allah**

**Book:**

**Lets Learn Dialux**

**By:**

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Electrical Eng. Department  
Power & Machines Section**

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**Contents:**

**Introduction  
Blue Edition  
Red Edition**

- :: ::
- امج مشهور يستخدم فى تصميم الانارة الداخلية والخارجية  
وغيرها فهو لاطهار كافة القيم ولاظهار صور ذات  
جودة عالية كذلك يمكنك التجول  
- مجانى لا يحتاج الى كود تفعيل.  
شركة عالمية.
  - يوجد منه نسختان الاولى زرقاء اللون حجمها لا يتجاوز  
ميجا بايت والثانية  
حمراء اللون حجمها يتعدى  
ميجا بايت .

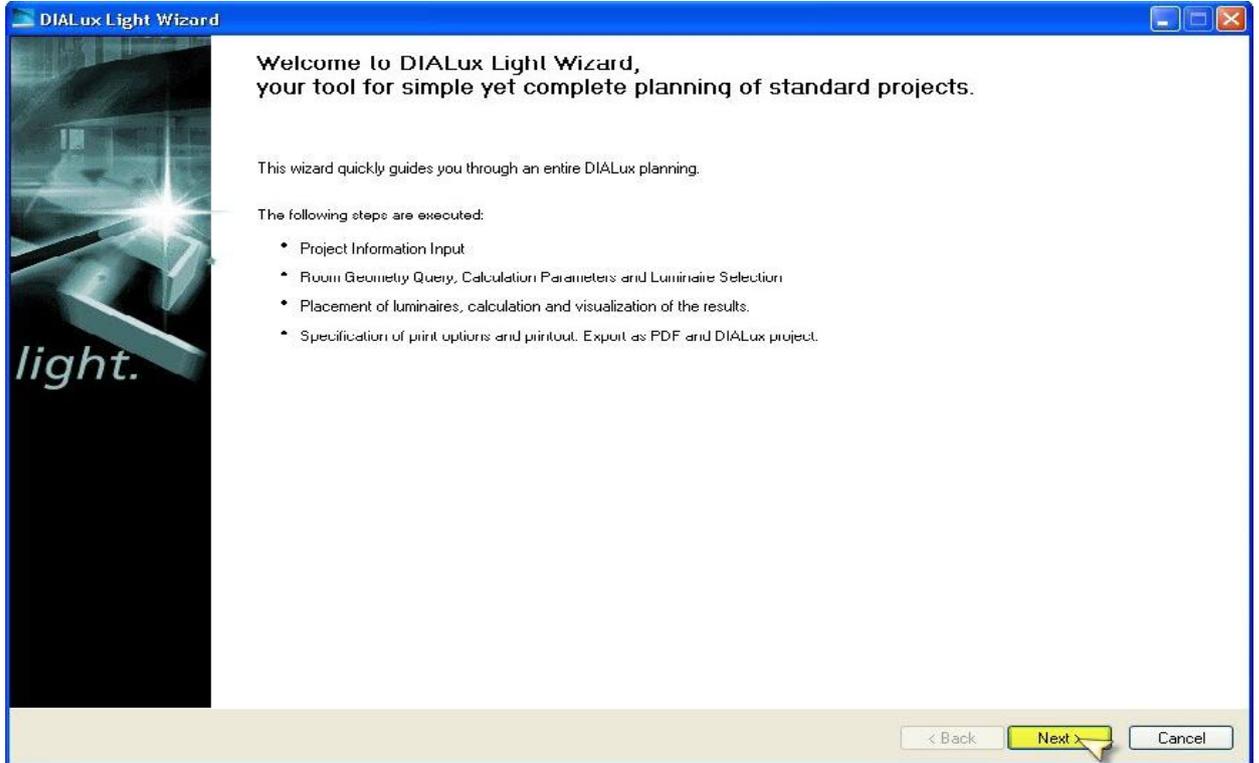
:: ::

وهى خاصة بالمبتدئين بسيطة وسهلة الاستخدام ولا نعمل بها ولكن نتدرب عليها

1



2



3

**DIALux Light Wizard**

**Project Information**  
Enter all information on the project, room and operator.

معلومات عن المشروع والغرفة

**Properties of project**

Project Name: Cafe (اسم المشروع)

Room Name: Net Cafe (اسم الغرفة)

Project Description: Internet & cafe 2 in 1 (وصف المشروع)

Freely nameable data fields which will be shown on the project cover sheet

Field Name:	Value:	ملاحظات
1. Partner for Contact	mohamed azmy	شريك للاتصال
2. Order No.	100	رقم الطلب
3. Company	Freedom Fighters	الشركة
4. Customer No.	100	رقم العميل
5.		

Set Field Name as Standard

Click here to save the field name for future projects.

**Contact**

معلومات عن المهندس والشركة

Contact: Ahmed Salah (الاتصال)

Telephone: +093 2 (هاتف)

FAX: (فكس)

E-mail: elec.ahmed1990@yahoo.com (ايميل)

Company: Freedom Fighters (الشركة)

Address: 17 elgomhorya st. , sohag , egypt (العنوان)

Company logo: (شعار الشركة)

Select Image...

Set Operator as Standard

Check here to save the operator data for future projects.

< Back Next > Cancel

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**DIALux Light Wizard**

**Data Input**  
Enter all values required for the room and select your luminaire and its mounting type.

هندسة الغرفة

**Room Geometry**

Length (a): 6.000 m (طول)

Width (b): 4.500 m (عرض)

Height: 2.500 m (ارتفاع)

Use L-Shaped Room

c: 4.000 m

d: 2.000 m

Preview:

معايير الانعكاس

**Reflection factors**

Ceiling: 70 % Standard Ceiling

Walls: 50 % Standard Wall

Ground: 20 % Standard Floor

معايير الغرفة

**Room Parameters**

Reference Values: Application example

Maintenance factor: 0.50

سطح العمل

**Workplane**

Height: 0.750 m

Wall zone: 0.500 m

اختيار الانارة

**Luminaire Selection**

Luminaire: DIAL 3 BS 900-Leuchte

Select the quantity here: DIAL

Luminous emittance 1

Lamp: T26 36W

Here you can modify the provided luminous flux of the luminaires:

Luminous	3350	lm
Wattage:	43	W

موضع الانارة

**Luminaire Mounting**

Mounting Type: Surface-Mounted

Modify the mounting height via one of the following parameters:

Suspension Height: 0.000 m

Height: 1.676 m

Mounting Height: 2.500 m

Dimensions (L x B x

< Back Next > Cancel

**DIALux Light Wizard**

**Data Input**  
Enter all values required for the room and select your luminaire and its mounting type.

**Room Geometry**

Length (a): 6.000 m  
Width (b): 4.500 m  
Height: 2.500 m

Use L-Shaped Room

c: 4.000 m  
d: 2.000 m

**Reflection factors**

Ceiling: 70 % Standard Ceiling  
Walls: 50 % Standard Wall  
Ground: 20 % Standard Floor

**Room Parameters**

Reference Values:  
Application example

Maintenance factor: 0.50

**Workplane**

Height: 0.750 m  
Wall zone: 0.500 m

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Mounting Type: Surface-Mounted

Modify the mounting height via one of the following parameters:

Suspension Height: 0.000 m  
Height: 1.676 m  
Mounting Height: 2.500 m  
Dimensions (L x B x

جهاز الاضاءة معلق في السقف

< Back Next > Cancel

**DIALux Light Wizard**

**Data Input**  
Enter all values required for the room and select your luminaire and its mounting type.

**Room Geometry**

Length (a): 6.000 m  
Width (b): 4.500 m  
Height: 2.500 m

Use L-Shaped Room

c: 4.000 m  
d: 2.000 m

**Reflection factors**

Ceiling: 70 % Standard Ceiling  
Walls: 50 % Standard Wall  
Ground: 20 % Standard Floor

**Room Parameters**

Reference Values:  
Application example

Maintenance factor: 0.50

**Workplane**

Height: 0.750 m  
Wall zone: 0.500 m

**Luminaire Selection**

Luminaire: DIAL 3 BS 900-Leuchte

Select the quantity here: DIAL

Luminous emittance 1

Lamp: T26 36W

Here you can modify the provided luminous flux of the luminaires:

Luminous	3350	lm
Wattage:	43	W

**Luminaire Mounting**

Mounting Type: User defined

Modify the mounting height via one of the following parameters:

Suspension Height: 0.250 m  
Height: 1.426 m  
Mounting Height: 2.250 m

مسافة الغطاء أي بعد جهاز الاضاءة عن السقف بالمتري

جهاز الاضاءة غاطس أي غير معلق في السقف مباشرة

< Back Next > Cancel



**DIALux Light Wizard**

**Calculation and Results**  
Here you can calculate various variations and check the results.

Luminaire: DIAL 3 BS 900-Leuchte

Dimensions (L x B x H): 1.340 x 0.160 x 0.074 m

Calculation Parameters

Planned Em: 500 lx **Suggestion**

Em from arrangement: 575 lx **اقترح مستوى الاتارة**

Horizontal arrangement

Number in x: 4, 1.50 m, 0.75 m

Vertical arrangement

Number in y: 3, 1.50 m, 0.75 m

Arrangement parameters

Luminaire Rotation: 180 **تدوير اجهزة الاتارة بزواية معينة**

**Centre up** **تنسيق اجهزة الاتارة يجعلها فى المنتصف**

Isolux Lines

Automatic

Free Choice

New: 0.00 lx

Paste

Delete

Values as Standard

0.00 0.00 0.00 0.00 0.00

0.00

0.00

0.00

Eav [lx] Emin [lx] Emax [lx] Emin / Eav Emin / Emax

Calculate

< Back Next > Cancel

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**DIALux Light Wizard**

**Calculation and Results**  
Here you can calculate various variations and check the results.

Luminaire: DIAL 3 BS 900-Leuchte

Dimensions (L x B x H): 1.340 x 0.160 x 0.074 m

Calculation Parameters

Planned Em: 500 lx **Suggestion**

Em from arrangement: 575 lx

Horizontal arrangement

Number in x: 4, 1.50 m, 0.75 m

Vertical arrangement

Number in y: 3, 1.50 m, 0.75 m

Arrangement parameters

Luminaire Rotation: 180 **Centre up**

Isolux Lines

Automatic

Free Choice

New: 0.00 lx

Paste

Delete

Values as Standard

0.03 0.08 0.14 0.19 0.25 0.30 0.36 0.41 0.46 0.52 0.57

4.96	421	421	450	450	486	497	524	545	566	582	605
4.88	421	421	450	450	486	497	525	547	567	583	607
4.80	440	440	470	470	511	519	548	572	594	611	635
4.73	440	440	470	470	511	519	549	572	595	612	637
4.65	457	457	488	488	529	540	570	594	617	636	661
4.57	457	457	488	488	529	540	570	594	619	638	664
4.49	471	471	504	504	546	556	590	614	641	659	685

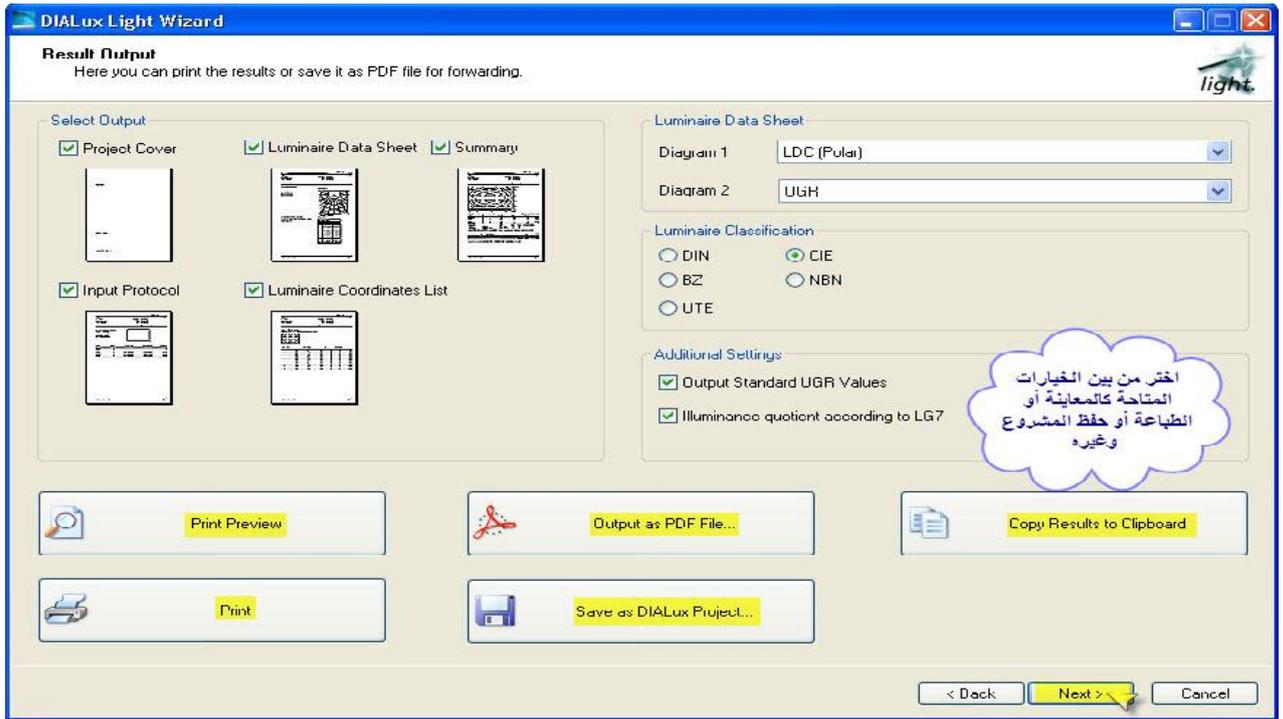
Eav [lx] Emin [lx] Emax [lx] Emin / Eav Emin / Emax

641 421 773 0.66 0.54

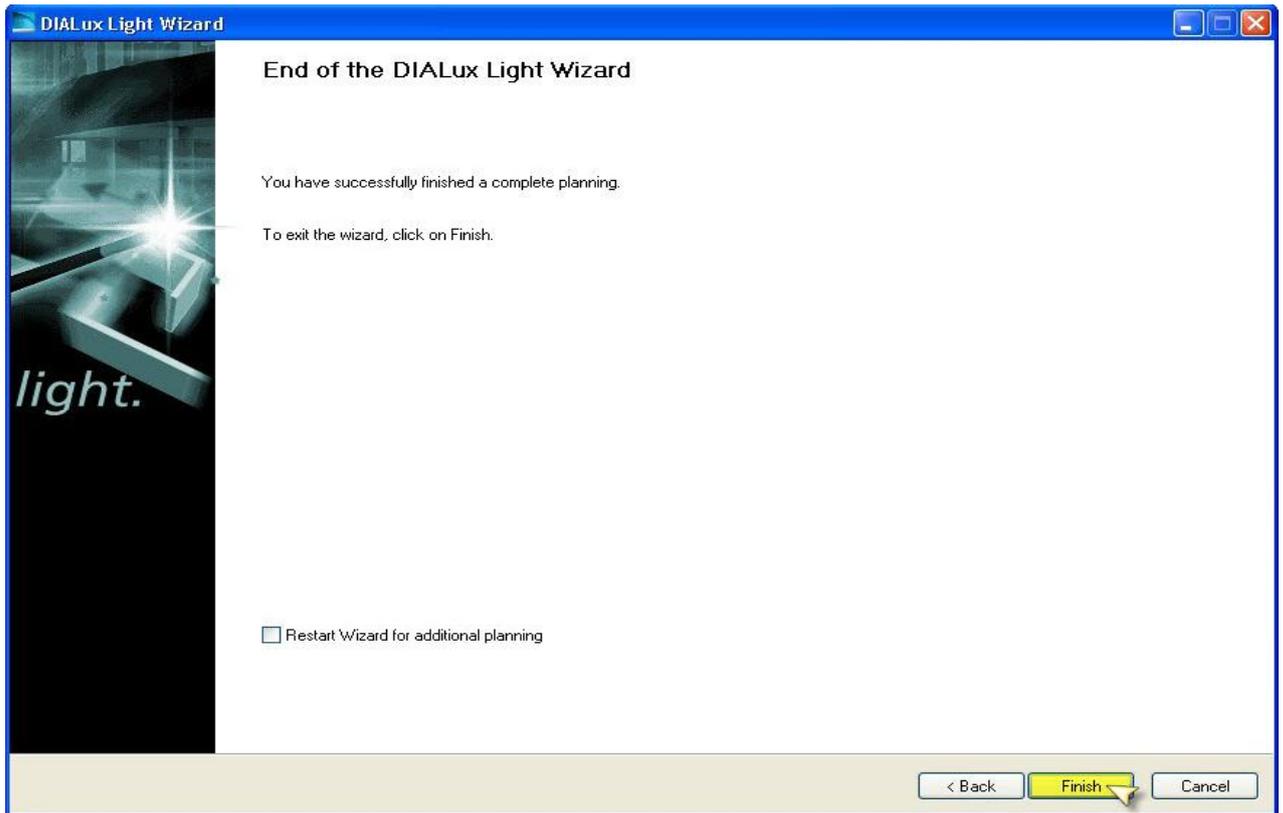
Calculate

< Back **Next >** Cancel

11



12



13



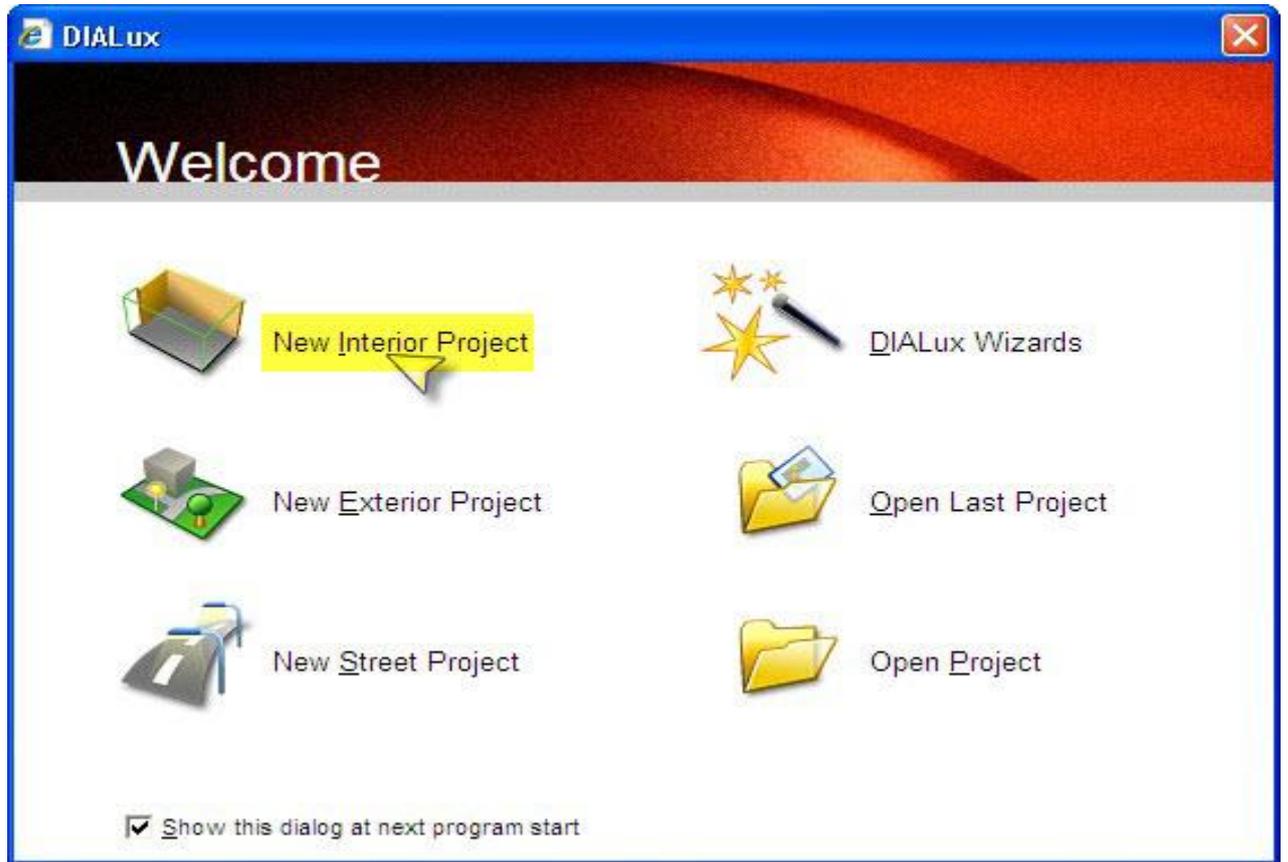
**::ثانياً::**

وهي خاصة بالمحترفين معقدة وصعبة الاستخدام ونعمل بها

1



2



3

DIALux 4.10 - Project 1 - [Room 1 - Floor plan]

File Edit View CAD Pick Insert Luminaire Selection Output Window Online ?

Project manager

Room Editor

Dimensions of the Enclosing Cuboid

Length: 9.600 m Width: 9.600 m

Height: 2.800 m  Surface Coordinates  World Coordinates

	x	y	l
1	0.000	0.000	9.600
2	9.600	0.000	9.600
3	9.600	9.600	9.600
4	0.000	9.600	9.600

Insert Coordinates Delete Coordinates

OK Cancel

Project 1

- Luminaires Used
- Room 1

Indoor Lig...

Edit room

- Insert New Room
- Load DWG or DXF file
- Edit Room Geometry
- Insert ceilings, ground, and columns
- Insert windows and doors

Insert equipment

- Place object
- Select Texture

Plan lighting

- Select Luminaires
- Insert Single Luminaire
- Insert Luminaire Field
- Insert Line Arrangement
- Insert Circle Arrangement

Calculation objects

- Insert

Outdoor Li...

- Street Ligh...
- Light scenes
- Emergency...
- Daylight
- Energy Eva...
- Sport Site ...
- Adjust Guide

نوع العرض ويفضل اختيار 3D view

الإضاءة الداخلية

الإضاءة الخارجية

النارة الشوارع

النارة الطوارئ

الإضاءة الطبيعية

تقديم استخدام الطاقة

النارة موقع رياضس

ضبط المرشد

9.552 m 2.029 m 0.000 m LUF NUM SCRL

For Help, press F1.

DIALux 4.10 - Project 1 - [Room 1 - Floor plan]

File Edit View CAD Pick Insert Luminaire Selection Output Window Online ?

Project manager Room 1 - Floor plan The Guide

**Room Editor**

Dimensions of the Enclosing Cuboid

Length: 5.000 m Width: 7.000 m

Height: 3.000 m  Surface Coordinates  World Coordinates

	x	y	l
1	0.000	0.000	5.000
2	5.000	0.000	7.000
3	5.000	7.000	5.000
4	0.000	7.000	7.000

Insert Coordinates Delete Coordinates

OK Cancel

Project 1  
Luminaires Used  
Room 1

Room 1 - Floor plan

المساحة الداخلية  
ادخل غرفة جديدة

اختر ابعاد الغرفة الطول والعرض والارتفاع

Indoor Lighting 1

**Edit room**

Insert New Room 2

Load DWG or DXF file

Edit Room Geometry

Insert ceilings, ground, and columns

Insert windows and doors

**Insert equipment**

Place object

Select Texture

**Plan lighting**

Select Luminaires

Insert Single Luminaire

Insert Luminaire Field

Insert Line Arrangement

Insert Circle Arrangement

**Calculation objects**

Insert calculation surfaces

Insert calculation points

**Evaluation**

Start Calculation

Output

Outdoor Lighting

Street Lighting

Light scenes

Emergency Lighting

Daylight

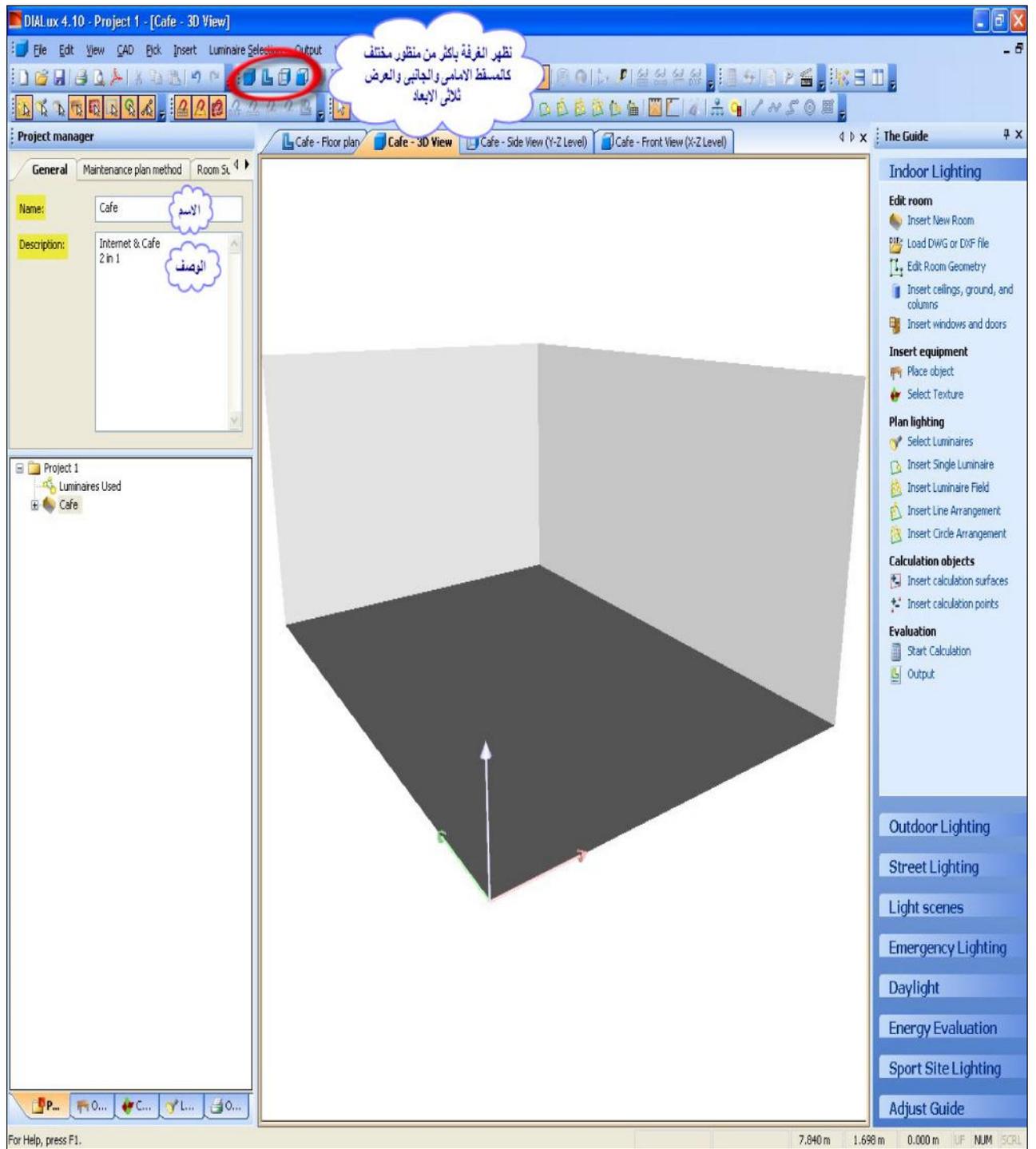
Energy Evaluation

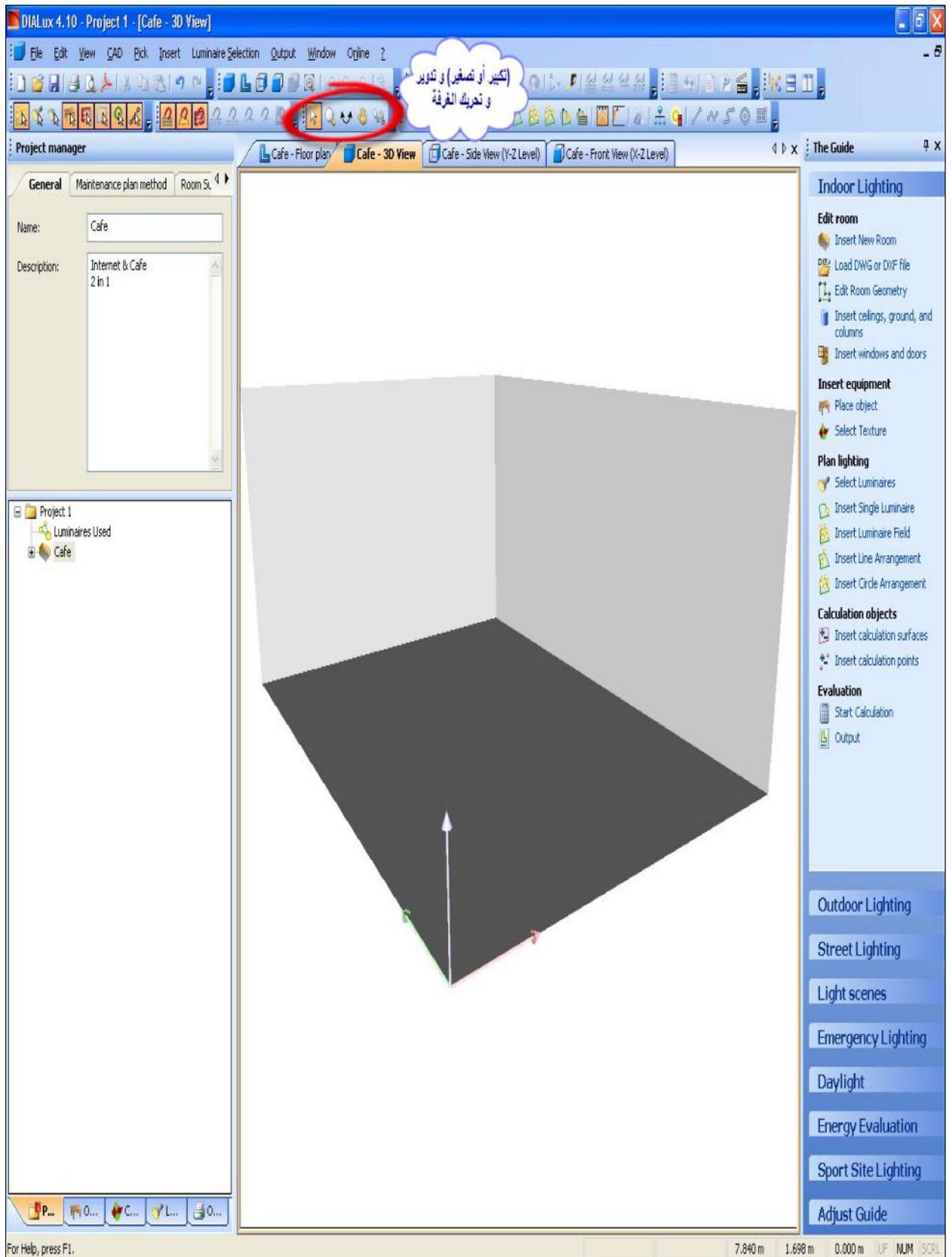
Sport Site Lighting

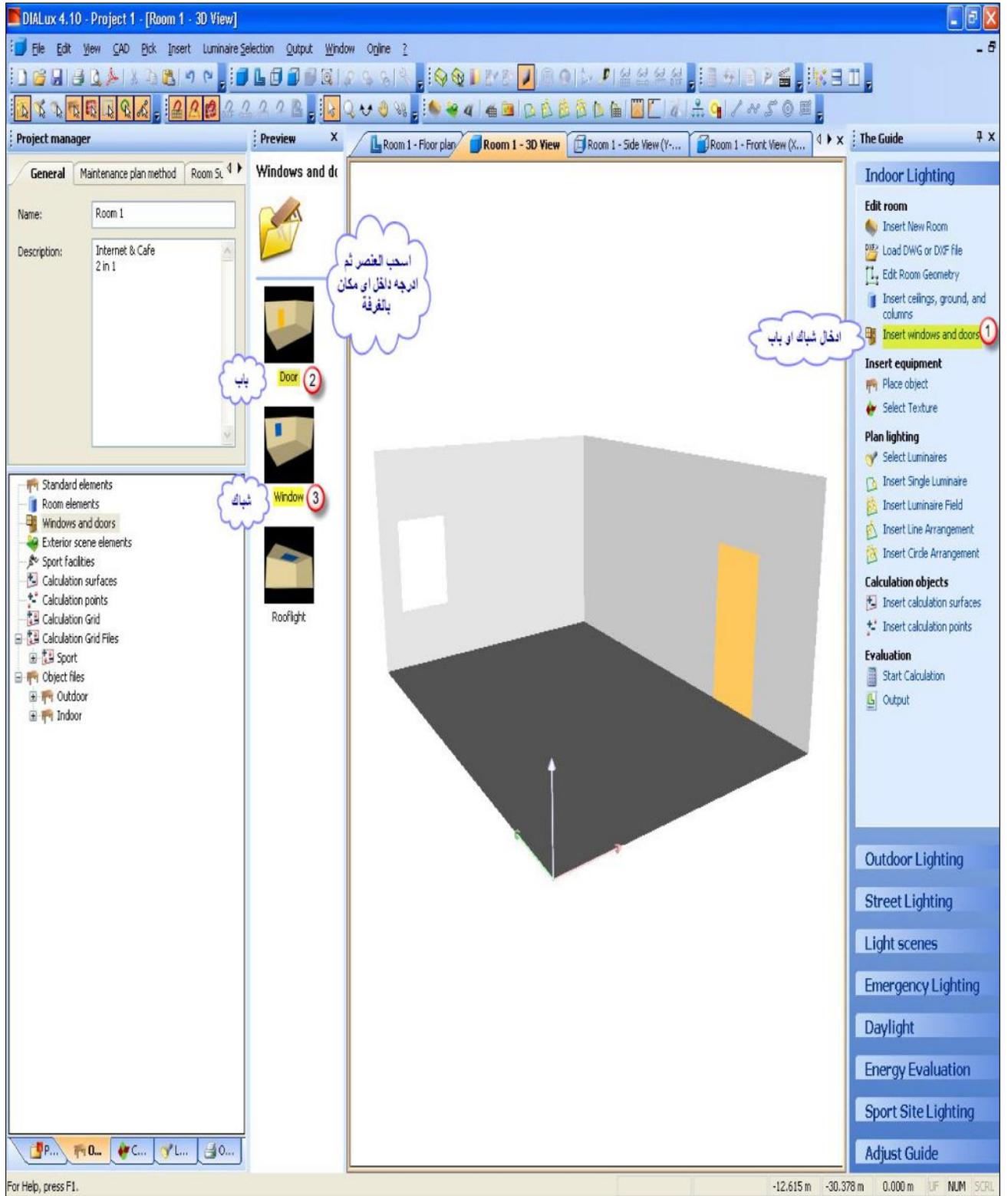
Adjust Guide

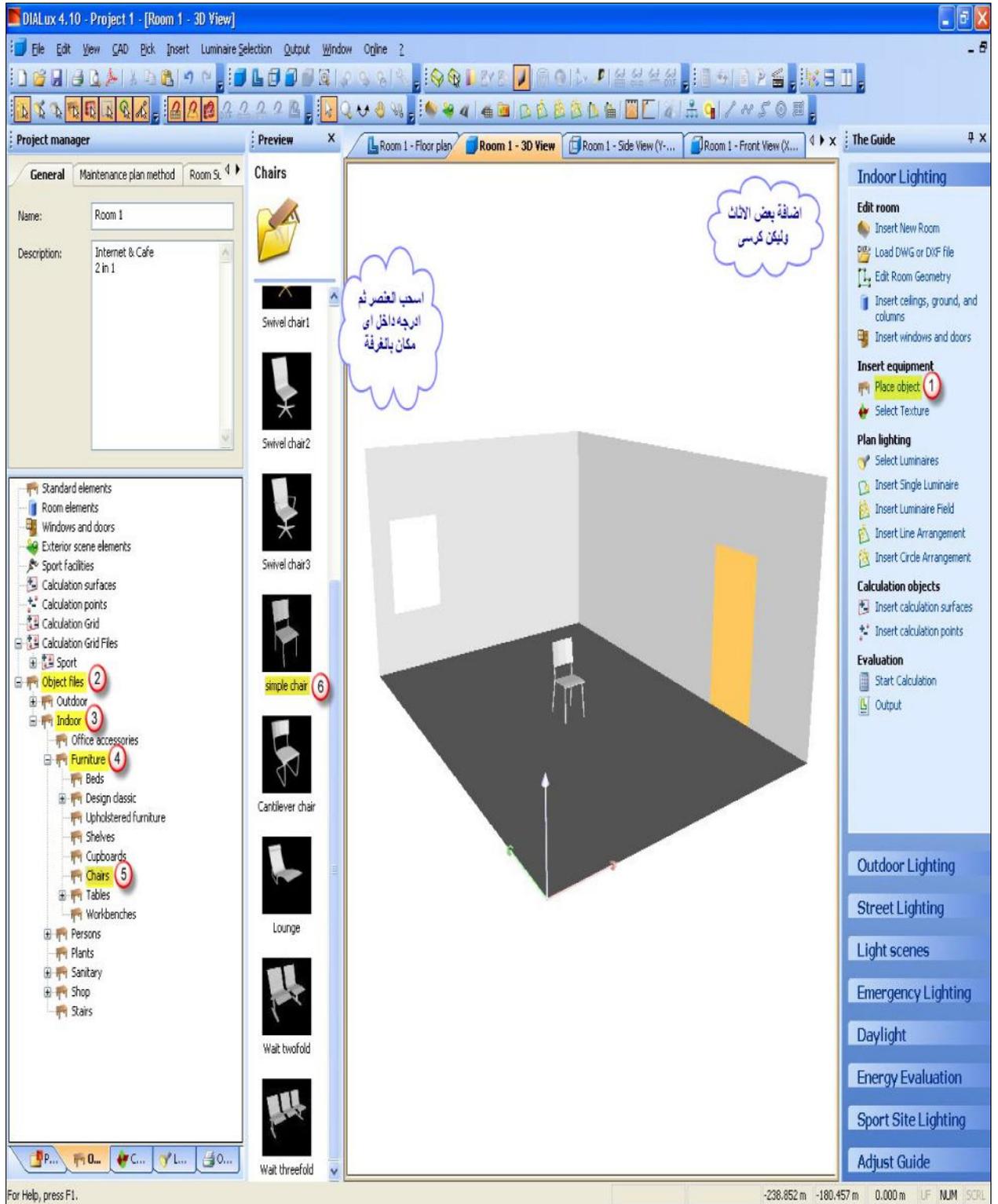
For Help, press F1.

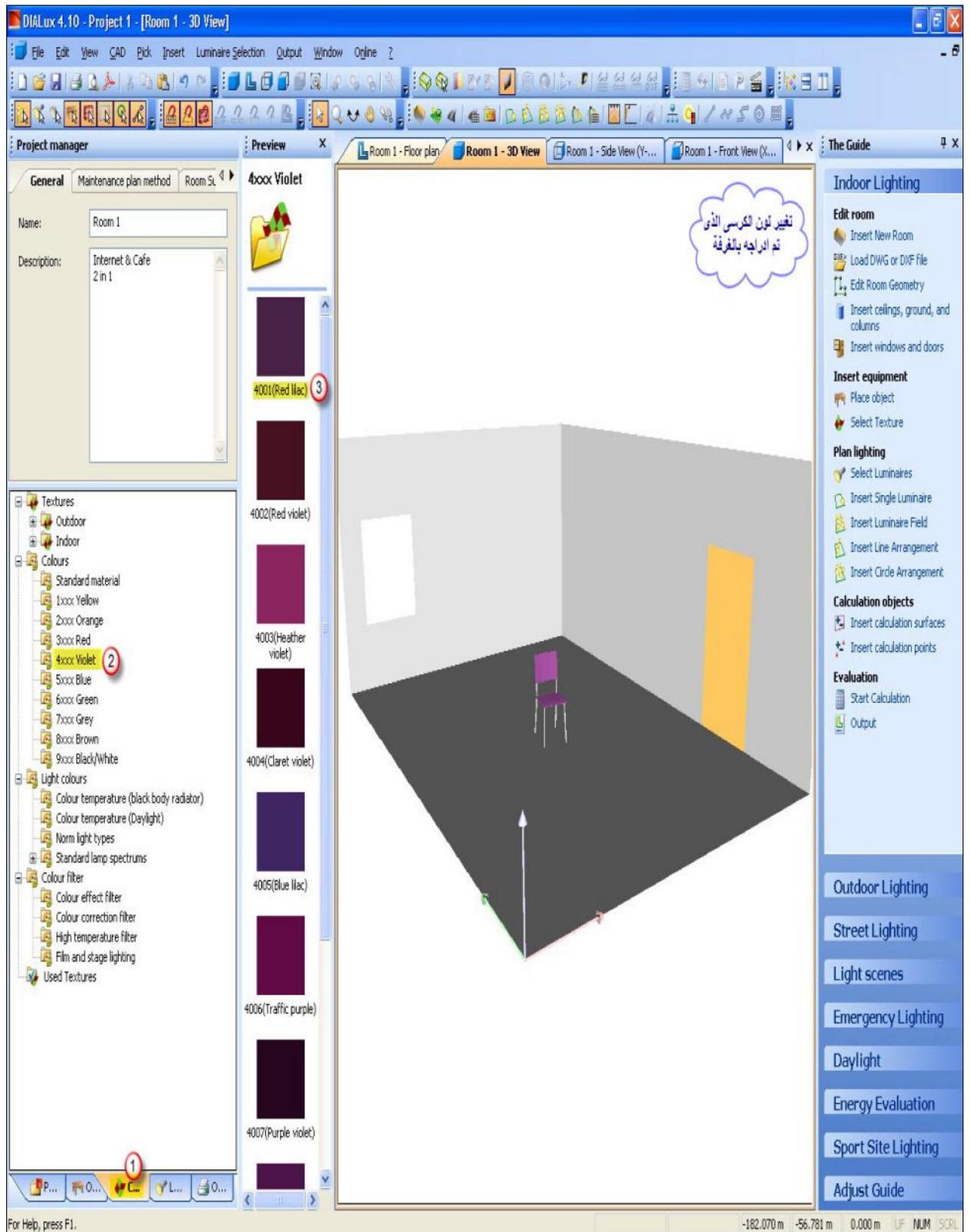
9.785 m 1.220 m 0.000 m LUF NUM SCRL

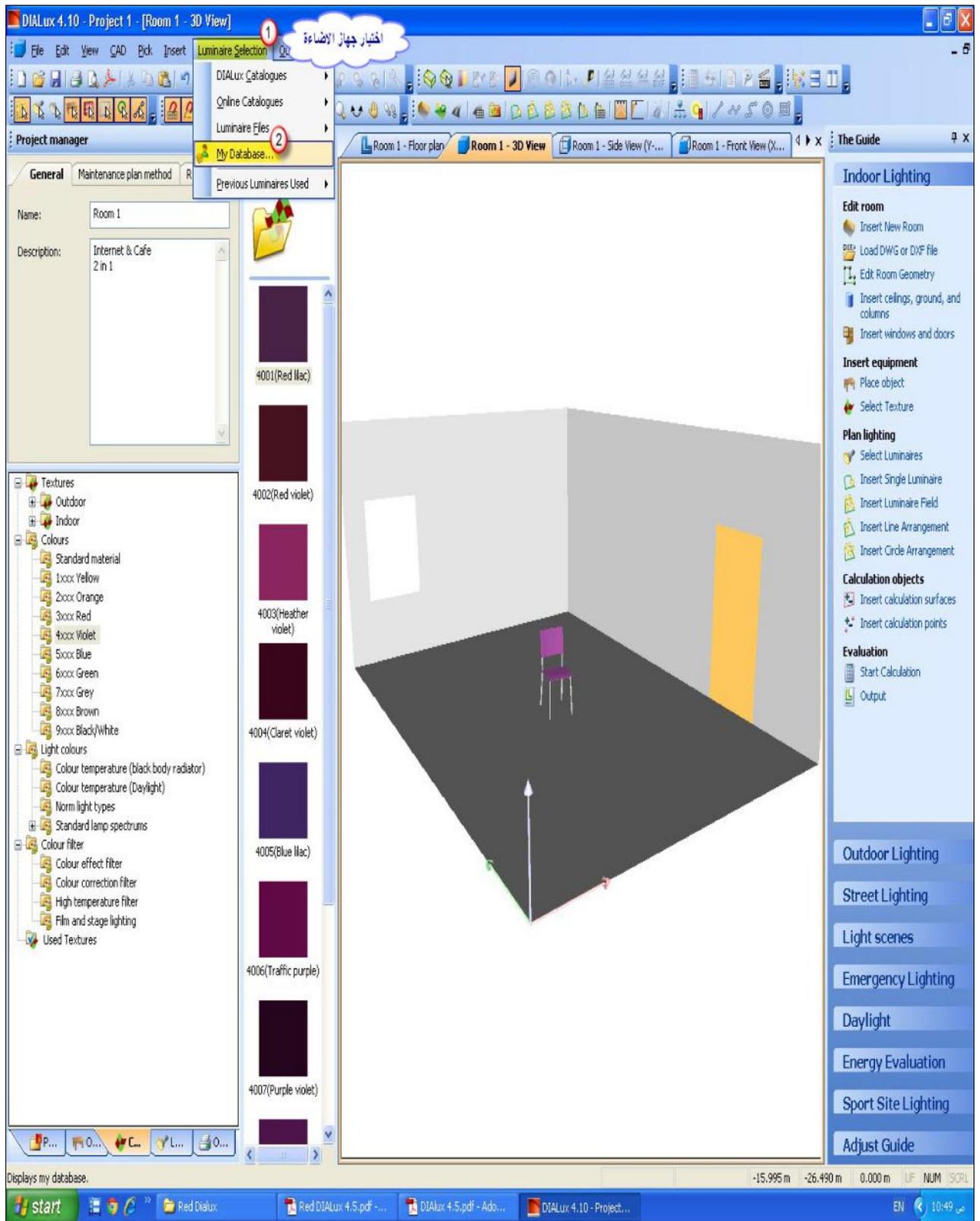


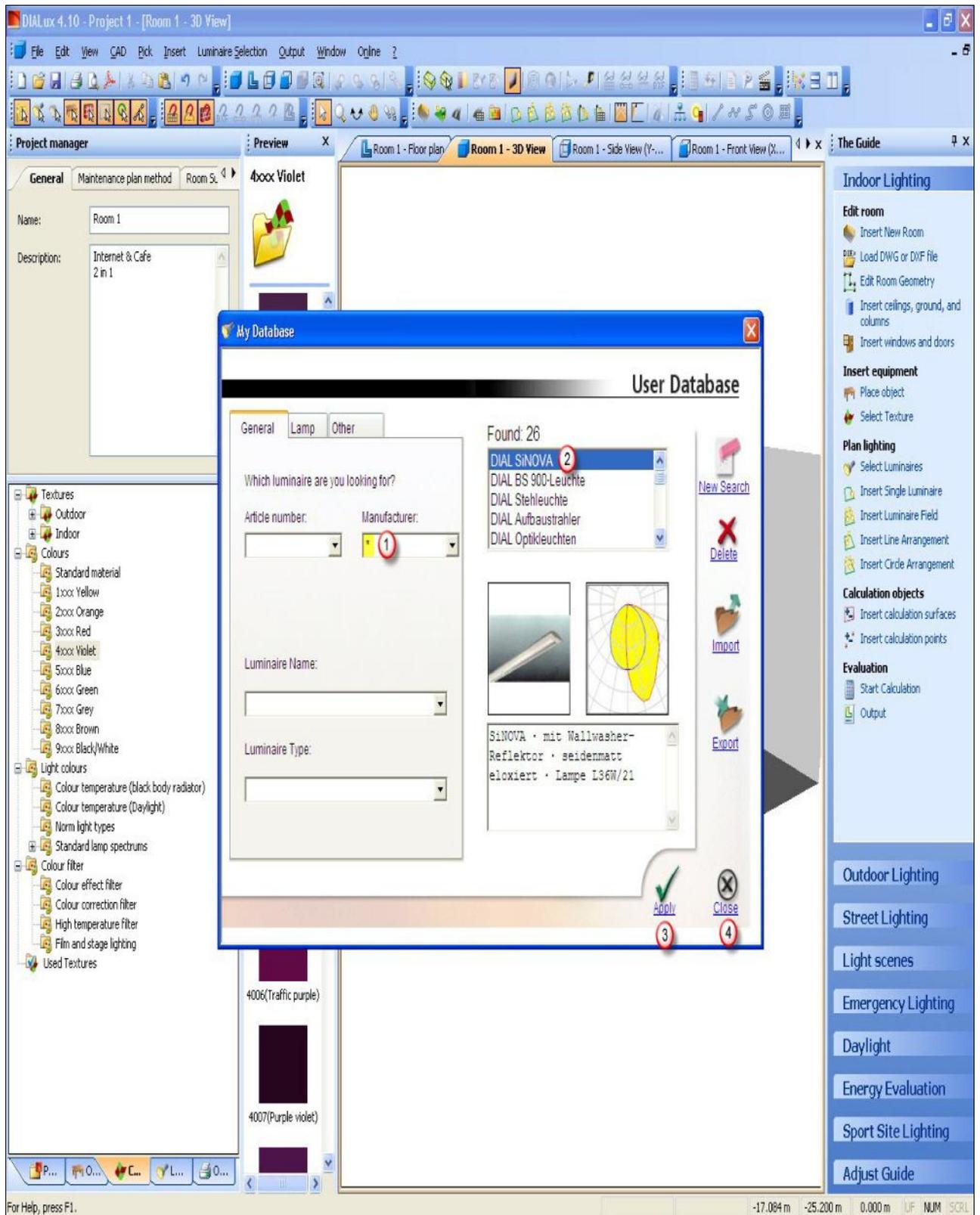






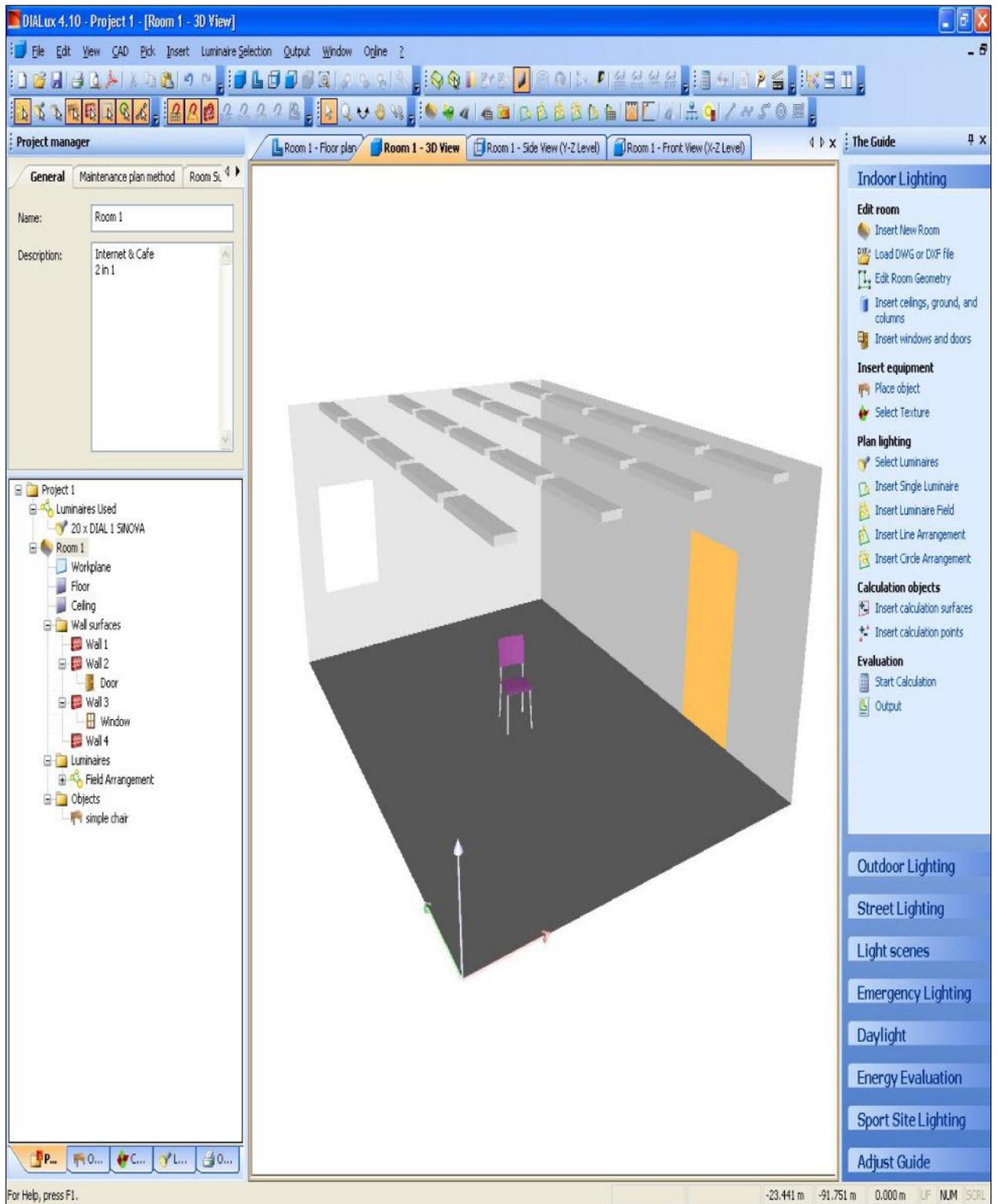


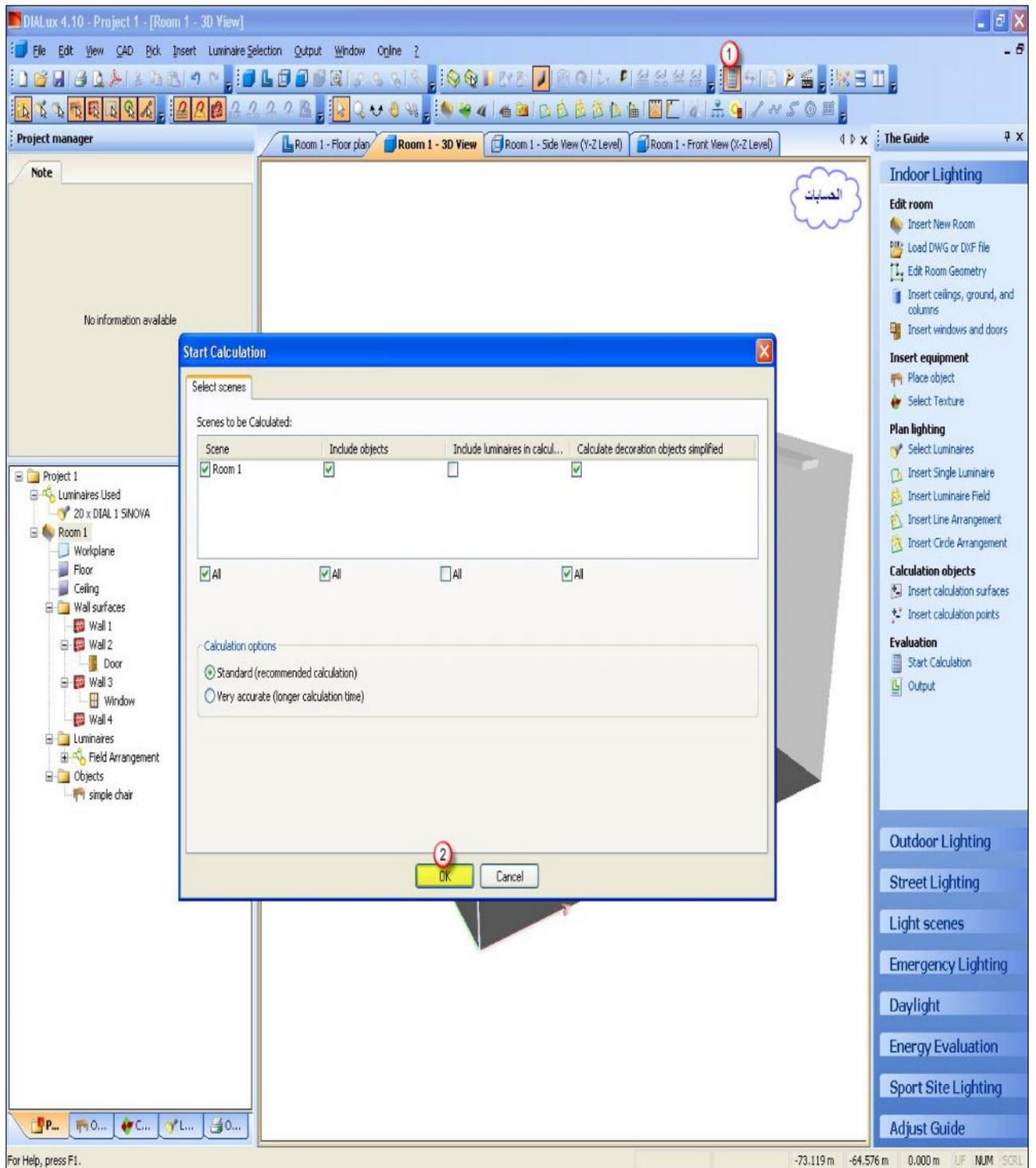


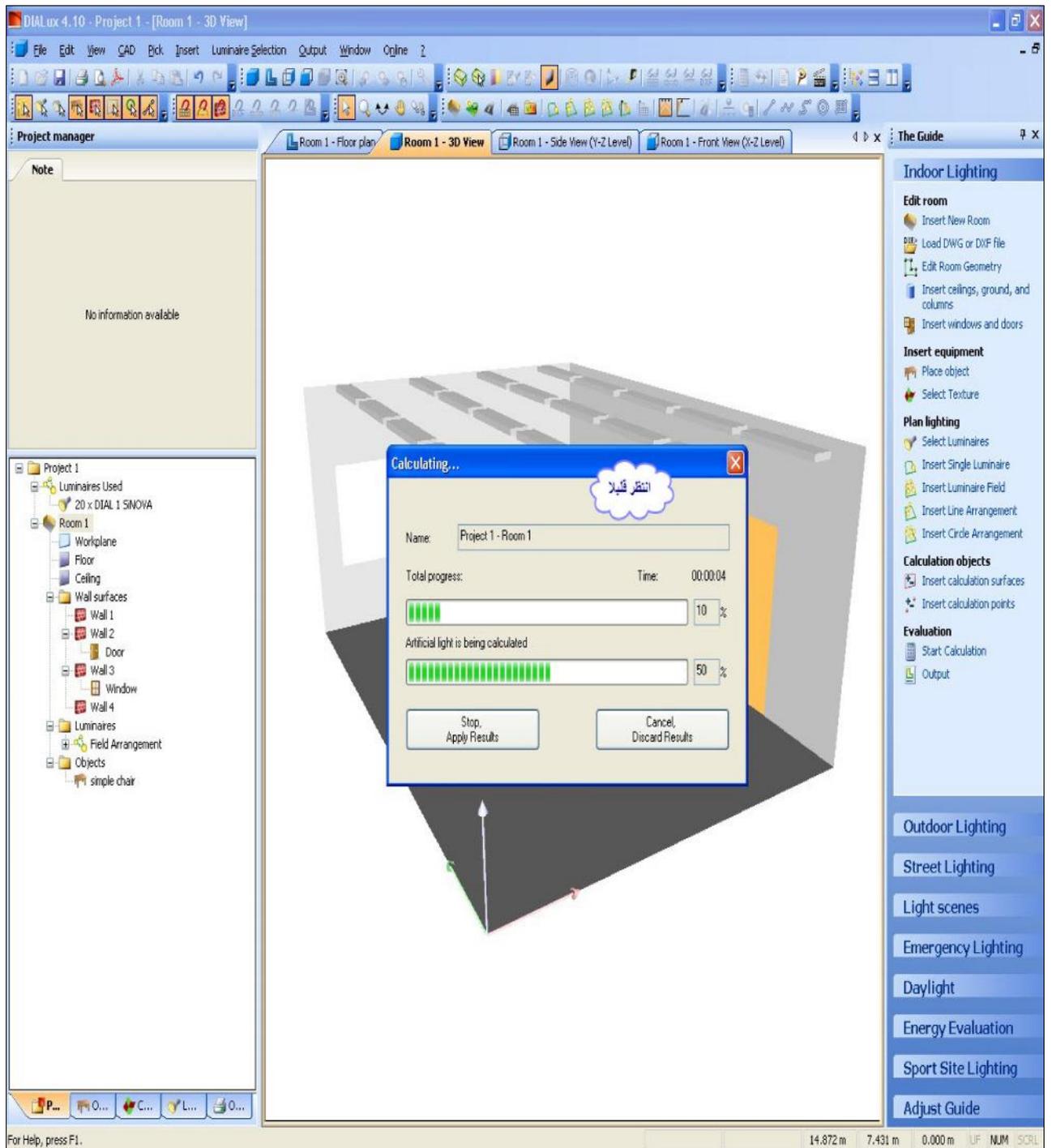












DIALux 4.10 - Project 1 - [Summary]

File Edit View CAD Pick Insert Luminaire Selection Output Window Online ?

Project manager

Room 1 - Floor plan Room 1 - 3D View Room 1 - Side View (Y-Z Level) Room 1 - Front View (X-Z Level) Summary The Guide

Output grid Isolines Format Scale D

Original (256 x 256 Points)  
 Distance 0.000 m  
 Points 128 x 128 Standard

Determine min, max, and average values from  
 Output Grid  
 Original Grid

Refresh View

Room 1

Summary  
 Input Protocol  
 Luminaire parts list  
 Maintenance plan  
 Floor plan  
 Luminaires (layout plan)  
 Luminaires (coordinates list)  
 Colour filter (layout)  
 Objects (layout plan)  
 Objects (coordinates lists)  
 Room elements (layout plan)  
 Room elements (coordinates list)  
 Sport Sites (layout plan)  
 Sport Sites (Coordinates List)  
 TV Cameras (Coordinates List)  
 Pole Positions (Coordinates List)  
 Pole Luminaires (Summary)  
 Sport Luminaires (Coordinates List)  
 Calculation Grid (Coordinates List)  
 Calculation surfaces (coordinates list)  
 Task Area (coordinates list)  
 UGR surfaces (coordinates list)  
 control group commissioning  
 Photometric Results  
 Calculation surfaces (results overview)  
 Calculation points (results overview)  
 UGR Observer (results overview)  
 GR Observer (Results Overview)  
 3D Rendering  
 False Colour Rendering  
 Room Surfaces  
 Workplane

Room 1 / Summary

Height of Room: 3.000 m, Mounting Height: 3.000 m, Maintenance factor: 0.80

Values in Lux, Scale 1:90

Surface	$\rho$ [%]	$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	$u0$
Workplane	/	600	247	877	0.412
Floor	20	473	111	757	0.233
Ceiling	70	141	83	229	0.589
Walls (4)	50	341	97	1261	/

Workplane:  
 Height: 0.750 m  
 Grid: 128 x 128 Points  
 Boundary Zone: 0.500 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.621, Ceiling / Working Plane: 0.236.

Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	$\Phi$ (Luminaire) [lm]	$\Phi$ (Lamps) [lm]	P [W]
1	20	DIAL 1 SINOVA (1.000)	1699	2350	36.0
			Total: 33981	Total: 47000	720.0

Specific connected load:  $20.57 \text{ W/m}^2 = 3.43 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $35.00 \text{ m}^2$ )

For Help, press F1.

0.00 lx 0.00 cd/m<sup>2</sup> -1.548 m 3.540 m 0.000 m 1.F. NUM SCAL

Indoor Lighting

Edit room  
 Insert New Room  
 Load DWG or DXF file  
 Edit Room Geometry  
 Insert ceilings, ground, and columns  
 Insert windows and doors

Insert equipment  
 Place object  
 Select Texture

Plan lighting  
 Select Luminaires  
 Insert Single Luminaire  
 Insert Luminaire Field  
 Insert Line Arrangement  
 Insert Circle Arrangement

Calculation objects  
 Insert calculation surfaces  
 Insert calculation points

Evaluation  
 Start Calculation  
 Output

Outdoor Lighting

Street Lighting

Light scenes

Emergency Lighting

Daylight

Energy Evaluation

Sport Site Lighting

Adjust Guide

DIAL 4.10 - C:\Documents and Settings\user\Desktop\Cafe.dlx - [Summary]

File Edit View CAD Pick Insert Luminaire Selection Output Window Online ?

New Ctrl+N  
Open... Ctrl+O  
Close  
Save Ctrl+S  
Save As... **حفظ المشروع**

Room 1 - Floor plan Room 1 - 3D View Room 1 - Side View (Y-Z Level) Room 1 - Front View (X-Z Level) Summary

### Room 1 / Summary

Height of Room: 3.000 m, Mounting Height: 3.000 m, Maintenance factor: 0.80 Values in Lux, Scale 1:90

Surface	$\rho$ [%]	$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	u0
Workplane	/	600	247	877	0.412
Floor	20	473	111	757	0.233
Ceiling	70	141	83	229	0.589
Walls (4)	50	341	97	1261	/

**Workplane:**  
Height: 0.750 m  
Grid: 128 x 128 Points  
Boundary Zone: 0.500 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.621, Ceiling / Working Plane: 0.236

**Luminaire Parts List**

No.	Pieces	Designation (Correction Factor)	$\Phi$ (Luminaire) [lm]	$\Phi$ (Lamps) [lm]	P [W]
1	20	DIAL 1 SINOVA (1.000)	1699	2350	36.0
			Total: 33981	Total: 47000	720.0

Specific connected load:  $20.57 \text{ W/m}^2 = 3.43 \text{ W/m}^2/100 \text{ lx}$  (Ground area:  $35.00 \text{ m}^2$ )

Indoor Lighting

**Edit room**

- Insert New Room
- Load DWG or DXF file
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- Insert ceilings, ground, and columns
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**Insert equipment**

- Place object
- Select Texture

**Plan lighting**

- Select Luminaires
- Insert Single Luminaire
- Insert Luminaire Field
- Insert Line Arrangement
- Insert Circle Arrangement

**Calculation objects**

- Insert calculation surfaces
- Insert calculation points

**Evaluation**

- Start Calculation
- Output

Outdoor Lighting

Street Lighting

Light scenes

Emergency Lighting

Daylight

Energy Evaluation

Sport Site Lighting

Adjust Guide

Saves the active document with a new name. 0.00 lx 0.00 cd/m<sup>2</sup> -1.548 m 3.540 m 0.000 m LUP NUM SCRL

start Red Dialux Red DIALux 4.5.pdf - Ad... DIALux 4.5.pdf - Ad... DIALux 4.10 - C:\Doc...

EN 11:29

DIALux 4.10 - C:\Documents and Settings\user\Desktop\Cafe.dlx - [Summary]

File Edit View CAD Pick Insert Luminaire Selection Output Window Online ?

Project manager

Room 1 - Floor plan Room 1 - 3D View Room 1 - Side View (Y-Z Level) Room 1 - Front View (X-Z Level) Summary

Output grid: Original (256 x 256 Points), Distance 0.000 m, Points 128 x 128 Standard

Room 1 / Summary

7.00 m  
6.50 m

Save As

Save in: Desktop

File name: Cafe.dlx

Save as type: DIALux Project (\*.dlx)

Workplane:  
Height: 0.750 m  
Grid: 128 x 128 Points  
Boundary Zone: 0.500 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.621, Ceiling / Working Plane: 0.236

Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	20	DIAL 1 SiNOVA (1.000)	1699	2350	36.0
Total:			33981	Total: 47000	720.0

Specific connected load: 20.57 W/m² = 3.43 W/m²/100 lx (Ground area: 35.00 m²)

For Help, press F1. 0.00 lx 0.00 cd/m² -1.548 m 3.540 m 0.000 m

Indoor Lighting

- Edit room
  - Insert New Room
  - Load DWG or DXF file
  - Edit Room Geometry
  - Insert ceilings, ground, and columns
  - Insert windows and doors
- Insert equipment
  - Place object
  - Select Texture
- Plan lighting
  - Select Luminaires
  - Insert Single Luminaire
  - Insert Luminaire Field
  - Insert Line Arrangement
  - Insert Circle Arrangement
- Calculation objects
  - Insert calculation surfaces
  - Insert calculation points
- Evaluation
  - Start Calculation
  - Output

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Adjust Guide

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