



# CLEAN.ROOM DESIGN DATA

Table L.7 - LED Lighting Calculation

شركة البدرى للإضاءة المتخصصة

إحدى شركات مجموعة البدرى للتنمية والاستثمار

**BADRY Lighting Professionals' Co**

## Pharmaceutical Cleanroom Lighting Project - Quote 22498-00

Table L.7: Lighting Design Data for Cleanroom (LED Lighting)

S. No.	Cleanroom Area / Bay	Room Description	CLASS	Application	STD LUX Range	Design LUX Target	Length (M)	Width (M)	Floor Area (M <sup>2</sup> )	Height (M)	Maintenance Factor	Work-Plane (M)	Used LED Fixture Recessed Ceiling LED Panels	Fixture Power (W)	No. of LED Luminaires	X-Axis Fixtures	Y-Axis Fixtures	Result Illuminance (LUX)	Total O/P Power (Watt)	Specific Load (W/M <sup>2</sup> )
1	CLRM-01	Production Area	IZO-7	Operation & Working Area	750-1000	750	13.5	6.0	81.0	3.0	0.8	0.8	LED Panel 60X60CM C90, 4960LM, 4KK	40	18	6	3	760	720	8.89
2	CLRM-02	Warehouse Area	IZO-7	Delivery & Handling Area	500-750	500	13.5	6.0	81.0	3.0	0.8	0.8	LED Panel 60X60CM C90, 4960LM, 4KK	40	12	6	2	517	480	5.93
3	CLRM-03	Change Rooms	IZO-8	Changing & Mirror Rooms	200-400	300	2.5	12.0	30.0	3.0	0.8	0.8	LED Panel 60X60CM C35, 3862LM, 4KK	36	5	1	5	353	180	6.00
4	CORD-A, 1	Corridor 1	NON Class.	Corridors & Staircase	150-200	150	20.0	2.0	40.0	2.6	0.8	0.1	LED Panel Dia 20CM D70, 1093LM, 3KK	28	9	9	1	158	252	6.30
5	CORD-A, 2	Corridor 2	NON Class.	Corridors & Staircase	150-200	150	20.0	2.0	40.0	2.6	0.8	0.1	LED Panel Dia 20CM D70, 1093LM, 3KK	28	9	9	1	158	252	6.30
6	CORD-B, 3	Corridor 3	NON Class.	Corridors & Staircase	150-200	150	2.0	12.0	24.0	2.6	0.8	0.1	LED Panel Dia 20CM D70, 1093LM, 3KK	28	6	1	6	173	168	7.00
7	CORD-B, 4	Corridor 4	NON Class.	Corridors & Staircase	150-200	150	2.0	12.0	24.0	2.6	0.8	0.1	LED Panel Dia 20CM D70, 1093LM, 3KK	28	6	1	6	173	168	7.00
<b>SUM</b>	<b>Summary of Average Whole Lighting Records for Cleanroom</b>					<b>600</b>	<b>20</b>	<b>16</b>	<b>320</b>	<b>3.0</b>	<b>0.8</b>	<b>0.8</b>	<b>LED Panels Square / Spots 200,000 Lumens</b>	<b>34</b>	<b>65</b>	<b>9</b>	<b>8</b>	<b>625</b>	<b>2,220</b>	<b>6.94</b>