

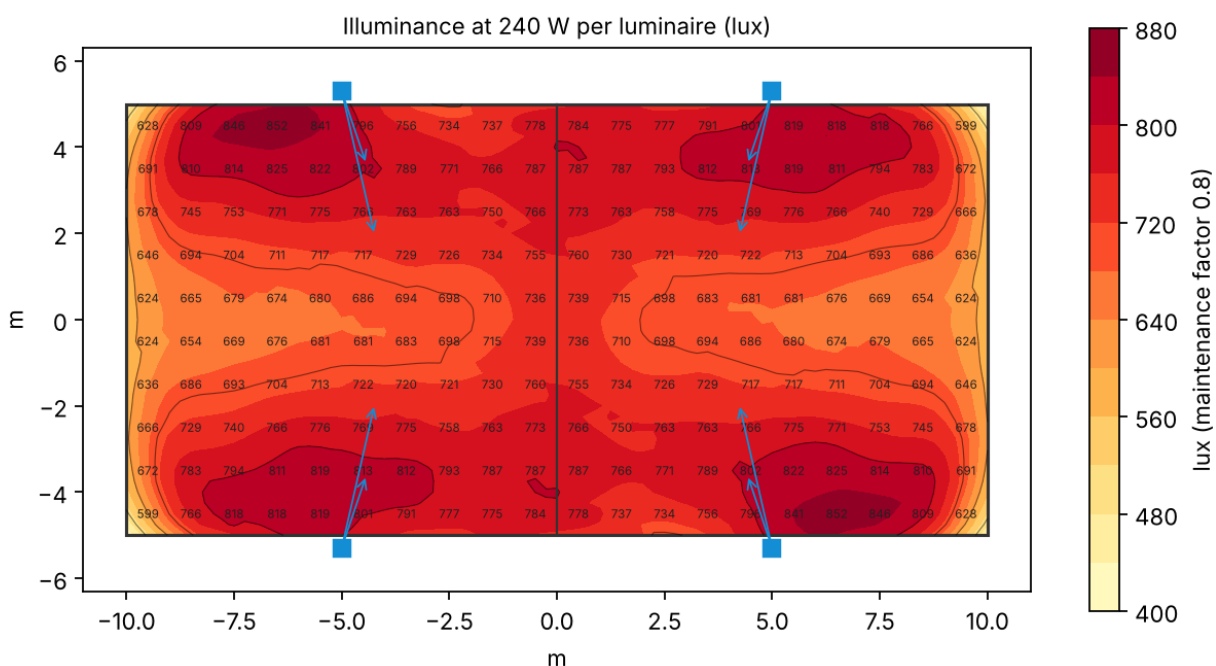
Padel court lighting calculation

Standard padel court 20 × 10 m · 4 poles · 8 × Dimay LED padel court floodlight 100–240 W adjustable, 100×60° (DM100958)

Results

Setting per luminaire	Total (8 pcs)	E avg	E min	U0	Class EN 12193
100 W	0.81 kW	300 lx	245 lx	0.82	II
150 W	1.21 kW	453 lx	379 lx	0.84	II
200 W	1.63 kW	653 lx	526 lx	0.80	I
240 W	1.94 kW	742 lx	599 lx	0.81	I

According to EN 12193 (sports lighting), padel requires 500 lux for **class I** (high-level competition), 300 lux for **class II** (club competition) and 200 lux for **class III** (training and recreation), each with a uniformity U0 of at least 0.7. With the same layout, the power setting determines the light level: at 100 W the court is suitable for training and club competition (class II), at 150 W comfortably class II, and at 200 W and 240 W the court reaches class I for high-level competition. In every setting the uniformity is well above the required 0.7. One luminaire lets you choose between economical training light and full competition lighting.



Layout

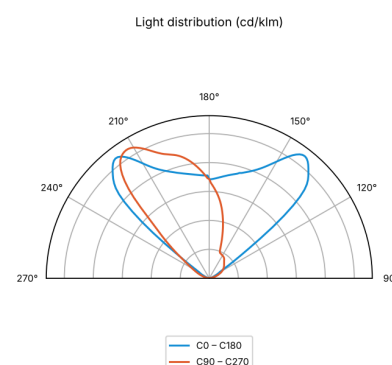
Pole	Position (x, y)	Height	Floodlights	Tilt angles
P1	5.0 m, -5.3 m	6.0 m	2 × 100–240 W	17° and 30°
P2	-5.0 m, -5.3 m	6.0 m	2 × 100–240 W	17° and 30°
P3	5.0 m, 5.3 m	6.0 m	2 × 100–240 W	17° and 30°
P4	-5.0 m, 5.3 m	6.0 m	2 × 100–240 W	17° and 30°

Origin at the centre of the court; x along the length (20 m), y across the width (10 m). The poles stand 0.3 m outside the side of the playing area. Tilt angle measured from vertically downwards.

Luminaire and power settings

Dimay LED padel court floodlight 100–240 W adjustable, 100×60° (DM100958) · Optic: 100×60°, asymmetric

Setting	Power consumption	Luminous flux	Efficacy
100 W	101.1 W	17,027 lm	168 lm/W
150 W	150.8 W	25,985 lm	172 lm/W
200 W	204.0 W	37,202 lm	182 lm/W
240 W	242.2 W	42,277 lm	175 lm/W



About the light files (IES/LDT)

The light files for this product (IES and LDT for each power setting) can also be downloaded. These are technical measurement files for lighting design software such as DIALux evo and Relux; opened in a text editor they only show numbers. Your installer or lighting designer can use them in their own calculation. If you prefer, we will make the calculation for your court free of charge.

Calculation method and assumptions

This calculation was carried out by Dimay LED using the point-by-point method (inverse square law and cosine law) based on the measured light distribution of the luminaire (IES file). Only direct light on the horizontal playing surface is calculated; reflections from glass and mesh are not included, so actual values are usually slightly higher in practice. A maintenance factor of 0.8 allows for lumen depreciation and soiling; 0.9 is common for a well-maintained LED installation.

Actual results depend on the exact pole positions, pole height, aiming and surroundings. We are happy to adapt the calculation to your own situation: send us the dimensions of your court and the desired pole positions via info@dimay.com or WhatsApp +34 665 097 599.