



### GENERAL EXPLANATION

This training set is designed to examine the differences between ballasts used in fluorescent lamps and their power consumption effects and the differences between the light consumption and energy consumption of 4 lamps which are the most used in environmental lighting today.

### EXPERIMENTS

1. Comparison of energy and power coefficients between ballast applications
2. Comparison of energy and power coefficients between gas discharge lamp applications
3. Comparison of color appearance under gas discharge lamp applications

### PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog

### TECHNICAL SPECIFICATION

In a part of the training set, 4 fluorescent lamps in 21 W power are operated with mechanical ballast, electronic ballast and dimmable ballast and their power and power coefficients are measured and the power consumption effects of the ballasts used in the same power lamps are examined. In the other part, there are four types of lamps used for ambient lighting, including high-pressure sodium-vapor lamp with 100 W power, gas lamp, led projector, compact fluorescent lamp and metal halide lamp. These lamps are examined in terms of lighting efficiency and color conversion indexes by measuring the power, power coefficients and light intensities they have consumed by using a closed, black screen, equal measure and the same height.

GAZ DEŞARJLI METAL HALİDE			GAZ DEŞARJLI YÜKSEK BASINÇ SODYUM BUHARLI			KOMPAKT FLUORESAN LAMBA			LED		
GERİLİM	220	V	GERİLİM	220	V	GERİLİM	220	V	GERİLİM	220	V
GÜÇ	100	W	GÜÇ	100	W	GÜÇ	100	W	GÜÇ	100	W
DUY	E 40		DUY	E 40		DUY	E 27		DUY	—	
İŞİK AKISI	10000	lm	İŞİK AKISI	10000	lm	İŞİK AKISI	8000	lm	İŞİK AKISI	9000	lm
İŞİK ETKİNLİĞİ	106	lm/W	İŞİK ETKİNLİĞİ	100	lm/W	İŞİK ETKİNLİĞİ	80	lm/W	İŞİK ETKİNLİĞİ	90	lm/W
RENK SICAKLIĞI	3000	K	RENK SICAKLIĞI	2000	K	RENK SICAKLIĞI	6400	K	RENK SICAKLIĞI	6500	K
RENK GERİ VERİMİ	80-89	Ra	RENK GERİ VERİMİ	25-70	Ra	RENK GERİ VERİMİ	75-90	Ra	RENK GERİ VERİMİ	65-89	Ra
MAX.UZUNLUK	210	mm	MAX.UZUNLUK	204	mm	MAX.UZUNLUK	243	mm	MAX.UZUNLUK	24	mm
ÇAP	47	mm	ÇAP	46	mm	ÇAP	78	mm	ÇAP	24	mm
RENK	830, Sıcak Beyaz		RENK	Altın Sarımsı		RENK	Beyaz		RENK	Beyaz	
Açık hava spor sahalarında, Bina dış cephe aydınlatmalarında			Yol aydınlatmasında, Sanayi alanlarının aydınlatılması Spor tesislerinin aydınlatılması			Çalışma odaları, Atelyeler, Ev Ofisleri			Halk saha, Otopark, Stadyum, Bahçe, Şantiye		

### TECHNICAL DETAILS

- 100 W led floodlight
- 100 W gas discharge high pressure sodium
- Steam light bulb
- 100 W compact fluorescent
- 100 W metal halide
- 4x21 W fluorescent lamp
- Mechanical ballast
- Electronic ballast
- Dimmable electronic ballast
- Electronic ballast with sensor