



Rigan

RECESSED DIRECTIONAL SPOTLIGHTS | TEC SERIES

Modern, angular, recessed spotlight for spaces that need precise, concentrated illumination or wall washing effects. Spotlight rotates through 355° and pivots through 65°. Optimized for directional beam in retail shops and commercial spaces, showrooms, art galleries. May be installed onto the wall. Can be equipped with a wide range of special temperature colors.

Rigan recessed spotlights come in several series, with various add-on and controls:

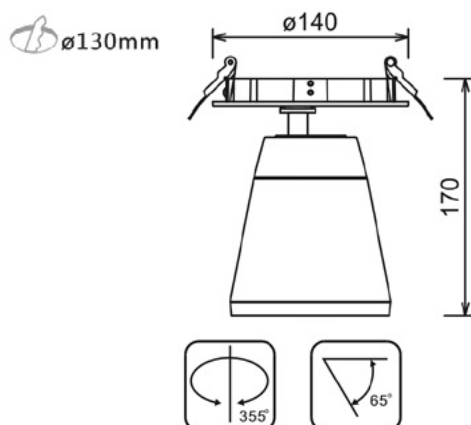
- Rigan TEC – the standard for any project in the retail sector
- Rigan ECO - DALI – with DALI controls for dimming
- Rigan EM – with emergency lighting kit
- Rigan ECO-DALI EM – with both dimming and emergency kit

APPLICATION

Supermarket | Fashion | Retail | Hospitality | Exhibition | Arhitectural

FEATURES & BENEFITS

- CRI > 80 as standard, up to 98 for certain special color
- 15 color temperatures, including specialized options for food, fashion, art, hospitality and AGI light
- Variety of optics – 4 angles from narrow beams to flood beams
- Luminaire efficiency: 117lm/W @4000K



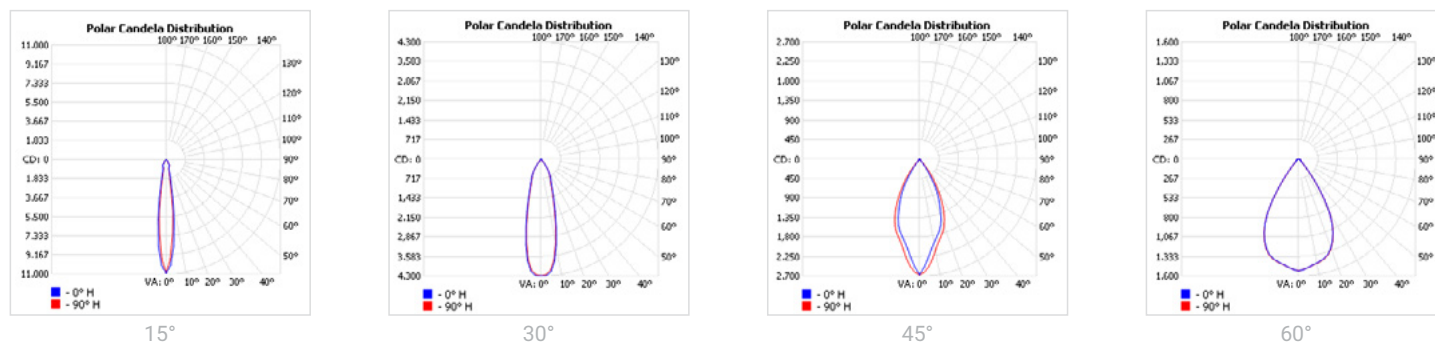
SPECIFICATIONS

Power consumption	12W, 14W, 17W, 20W, 23W, 27W
Dimensions	D115xH170xØ140mm±1mm (Cut out Ø130mm)
Weight	1.1 Kg
Housing materials	Aluminium, Glass
IK code	IK02
THD (at 230V, 50Hz, Full load)	<20%
Protection class	Safety class 1
Operating temperature [°C]	-20 ... +45 °C / -4F ... +113F
Operating humidity [%]	10 ÷ 85
Power factor	≥0.95
AC Input [Vac]	220 - 240 VAC
Lens angle [°]	15°, 30°, 45°, 60°
Lifespan [h]	50,000
Housing color	○ RAL 9003 - Signal White, ● RAL 9005 - Jet Black, ● RAL 9006 - White Aluminium
Lumen maintenance	L90/B10@50,000h at 25°C
IP factor (general)	IP20
Control option	For more information please see RIGAN ECO-DALI datasheet
Warranty [years]	5
Storage temperature range [°C]	-20 ... +55 / -4F ... +131F
Emergency option	For more information please see RIGAN TEC EM datasheet

#	Standard	Food	Fashion	AGI	Enhanced	ART	AMB	SUNSET
CRI	CRI80	CRI80	CRI95	CRI93	CRI90 / CRI95	CRI98	CRI80	CRI90
CCT [K]	2700 / 3000 / 3500 / 4000	BVF / FBS / FZM / FSM / FSH	FAS	AGI 3000 / 3500 / 4000	2700 / 3000 / 3500 / 4000	3000	2200	1800...2700
MacAdam	3	3 / 4 / 4 / 3 / 3	3	3	2	2	3	3

CRI - Color rendering, CCT - Color temperature, MacAdam - Color consistency

LIGHT DISTRIBUTION



TOLERANCES

Luminous flux tolerances: -/+ 5%

Consumption tolerance: -/+ 5% for TEC | -/+ 10% for TEC & KIT EM | -/+ 10% for ECO-DALI | -/+ 15% for ECO-DALI & KIT EM

BATTERY WARRANTY

TEC EM & ECO EM: 12 months warranty

TEC & ECO: -

MAXIMUM NO. OF LUMINAIRES ON A CIRCUIT

Power	Driver type	Control type	Circuit Breaker Type						
			Amperage	B			C		
				20	16	10	20	16	10
12-14W	SR	TEC		62	50	31	104	85	52
17-20W	SR	TEC		62	50	31	104	85	52
23-27W	SR	TEC		24	20	10	47	40	20
29-35W	SR	TEC		24	20	10	47	40	20
42W	SR	TEC		20	16	8	38	32	16
12-14W	SR	ECO		62	50	31	104	85	52
23-27W	SR	ECO		25	21	13	50	42	26
34-42W	SR	ECO		17	14	9	34	28	18

RISK GROUP

Standard (CRI80) RG1

FOOD (BVF, FBS, FSM) RG1

FOOD <20W (FZM, FSH) RG2 (dthr=1.8m)

FOOD >20W (FZM, FSH) RG2 (dthr=2.2m)

FAS RG1

AMB2200 RG1

ART RG1

AGI RG1

CRI95 RG1

SUNSET RG1

RG1

The evaluation of photobiological safety is carried out according to the standard IEC 62471:2008 ("Photobiological safety of lamps and lamp systems"). Following the definition of the risk grouping system of the mentioned IEC standard, the LEDs mounted on this family fall into the class "Low Risk (RG1 – No photobiological hazard under normal behavioral limitations)". Under real circumstances (regarding exposure time, pupils, observation distance), it is assumed that there is no endangerment to the eye from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect.

RG2

The evaluation of photobiological safety is carried out according to the standard IEC 62471:2008 ("Photobiological safety of lamps and lamp systems"). Following the definition of the risk grouping system of the mentioned IEC standard, the LEDs mounted on this family fall into the class "Moderate Risk (RG2)". Under real circumstances (regarding exposure time, pupils, observation distance), it is assumed that there is no endangerment to the eye from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect.

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
133000 Rigan R31012/2700/14W/80/A15	D115xH170xØ140mm±1mm	2700	1485	14W	107	15°
133001 Rigan R31012/3000/14W/80/A15	D115xH170xØ140mm±1mm	3000	1500	14W	108	15°
133002 Rigan R31012/3500/14W/80/A15	D115xH170xØ140mm±1mm	3500	1540	14W	110	15°
133003 Rigan R31012/4000/14W/80/A15	D115xH170xØ140mm±1mm	4000	1570	14W	113	15°
133005 Rigan R31012/2700/14W/80/A30	D115xH170xØ140mm±1mm	2700	1485	14W	107	30°
133006 Rigan R31012/3000/14W/80/A30	D115xH170xØ140mm±1mm	3000	1500	14W	108	30°
133007 Rigan R31012/3500/14W/80/A30	D115xH170xØ140mm±1mm	3500	1540	14W	110	30°
133008 Rigan R31012/4000/14W/80/A30	D115xH170xØ140mm±1mm	4000	1570	14W	113	30°
133010 Rigan R31012/2700/14W/80/A45	D115xH170xØ140mm±1mm	2700	1485	14W	107	45°
133011 Rigan R31012/3000/14W/80/A45	D115xH170xØ140mm±1mm	3000	1500	14W	108	45°
133012 Rigan R31012/3500/14W/80/A45	D115xH170xØ140mm±1mm	3500	1540	14W	110	45°
133013 Rigan R31012/4000/14W/80/A45	D115xH170xØ140mm±1mm	4000	1570	14W	113	45°
133015 Rigan R31012/2700/14W/80/A60	D115xH170xØ140mm±1mm	2700	1485	14W	107	60°
133016 Rigan R31012/3000/14W/80/A60	D115xH170xØ140mm±1mm	3000	1500	14W	108	60°
133017 Rigan R31012/3500/14W/80/A60	D115xH170xØ140mm±1mm	3500	1540	14W	110	60°
133018 Rigan R31012/4000/14W/80/A60	D115xH170xØ140mm±1mm	4000	1570	14W	113	60°
133020 Rigan R31012/2700/20W/80/A15	D115xH170xØ140mm±1mm	2700	2080	20W	104	15°
133021 Rigan R31012/3000/20W/80/A15	D115xH170xØ140mm±1mm	3000	2100	20W	105	15°
133022 Rigan R31012/3500/20W/80/A15	D115xH170xØ140mm±1mm	3500	2160	20W	108	15°
133023 Rigan R31012/4000/20W/80/A15	D115xH170xØ140mm±1mm	4000	2200	20W	110	15°
133025 Rigan R31012/2700/20W/80/A30	D115xH170xØ140mm±1mm	2700	2080	20W	104	30°
133026 Rigan R31012/3000/20W/80/A30	D115xH170xØ140mm±1mm	3000	2100	20W	105	30°
133027 Rigan R31012/3500/20W/80/A30	D115xH170xØ140mm±1mm	3500	2160	20W	108	30°
133028 Rigan R31012/4000/20W/80/A30	D115xH170xØ140mm±1mm	4000	2200	20W	110	30°
133030 Rigan R31012/2700/20W/80/A45	D115xH170xØ140mm±1mm	2700	2080	20W	104	45°
133031 Rigan R31012/3000/20W/80/A45	D115xH170xØ140mm±1mm	3000	2100	20W	105	45°
133032 Rigan R31012/3500/20W/80/A45	D115xH170xØ140mm±1mm	3500	2160	20W	108	45°
133033 Rigan R31012/4000/20W/80/A45	D115xH170xØ140mm±1mm	4000	2200	20W	110	45°
133035 Rigan R31012/2700/20W/80/A60	D115xH170xØ140mm±1mm	2700	2080	20W	104	60°
133036 Rigan R31012/3000/20W/80/A60	D115xH170xØ140mm±1mm	3000	2100	20W	105	60°
133037 Rigan R31012/3500/20W/80/A60	D115xH170xØ140mm±1mm	3500	2160	20W	108	60°
133038 Rigan R31012/4000/20W/80/A60	D115xH170xØ140mm±1mm	4000	2200	20W	110	60°
133040 Rigan R31012/2700/27W/80/A15	D115xH170xØ140mm±1mm	2700	2945	27W	110	15°
133041 Rigan R31012/3000/27W/80/A15	D115xH170xØ140mm±1mm	3000	2970	27W	110	15°
133042 Rigan R31012/3500/27W/80/A15	D115xH170xØ140mm±1mm	3500	3055	27W	114	15°
133043 Rigan R31012/4000/27W/80/A15	D115xH170xØ140mm±1mm	4000	3135	27W	117	15°
133045 Rigan R31012/2700/27W/80/A30	D115xH170xØ140mm±1mm	2700	2945	27W	110	30°
133046 Rigan R31012/3000/27W/80/A30	D115xH170xØ140mm±1mm	3000	2970	27W	110	30°
133047 Rigan R31012/3500/27W/80/A30	D115xH170xØ140mm±1mm	3500	3055	27W	114	30°
133048 Rigan R31012/4000/27W/80/A30	D115xH170xØ140mm±1mm	4000	3135	27W	117	30°
133050 Rigan R31012/2700/27W/80/A45	D115xH170xØ140mm±1mm	2700	2945	27W	110	45°
133051 Rigan R31012/3000/27W/80/A45	D115xH170xØ140mm±1mm	3000	2970	27W	110	45°
133052 Rigan R31012/3500/27W/80/A45	D115xH170xØ140mm±1mm	3500	3055	27W	114	45°
133053 Rigan R31012/4000/27W/80/A45	D115xH170xØ140mm±1mm	4000	3135	27W	117	45°
133055 Rigan R31012/2700/27W/80/A60	D115xH170xØ140mm±1mm	2700	2945	27W	110	60°
133056 Rigan R31012/3000/27W/80/A60	D115xH170xØ140mm±1mm	3000	2970	27W	110	60°
133057 Rigan R31012/3500/27W/80/A60	D115xH170xØ140mm±1mm	3500	3055	27W	114	60°
133058 Rigan R31012/4000/27W/80/A60	D115xH170xØ140mm±1mm	4000	3135	27W	117	60°
133060 Rigan R31012/BVF/27W/80/A15	D115xH170xØ140mm±1mm	BVF	2065	27W	77	15°
133061 Rigan R31012/FBS/27W/80/A15	D115xH170xØ140mm±1mm	FBS	1635	27W	61	15°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
133062 Rigan R31012/FZM/27W/80/A15	D115xH170xØ140mm±1mm	FZM	1530	27W	57	15°
133063 Rigan R31012/FSM/27W/80/A15	D115xH170xØ140mm±1mm	FSM	1530	27W	57	15°
133148 Rigan R31012/FSH/27W/80/A15	D115xH170xØ140mm±1mm	FSH	2250	27W	84	15°
133064 Rigan R31012/BVF/27W/80/A30	D115xH170xØ140mm±1mm	BVF	2065	27W	77	30°
133065 Rigan R31012/FBS/27W/80/A30	D115xH170xØ140mm±1mm	FBS	1635	27W	61	30°
133066 Rigan R31012/FZM/27W/80/A30	D115xH170xØ140mm±1mm	FZM	1530	27W	57	30°
133067 Rigan R31012/FSM/27W/80/A30	D115xH170xØ140mm±1mm	FSM	1530	27W	57	30°
133149 Rigan R31012/FSH/27W/80/A30	D115xH170xØ140mm±1mm	FSH	2250	27W	84	30°
133068 Rigan R31012/BVF/27W/80/A45	D115xH170xØ140mm±1mm	BVF	2065	27W	77	45°
133069 Rigan R31012/FBS/27W/80/A45	D115xH170xØ140mm±1mm	FBS	1635	27W	61	45°
133070 Rigan R31012/FZM/27W/80/A45	D115xH170xØ140mm±1mm	FZM	1530	27W	57	45°
133071 Rigan R31012/FSM/27W/80/A45	D115xH170xØ140mm±1mm	FSM	1530	27W	57	45°
133150 Rigan R31012/FSH/27W/80/A45	D115xH170xØ140mm±1mm	FSH	2250	27W	84	45°
133072 Rigan R31012/BVF/27W/80/A60	D115xH170xØ140mm±1mm	BVF	2065	27W	77	60°
133073 Rigan R31012/FBS/27W/80/A60	D115xH170xØ140mm±1mm	FBS	1635	27W	61	60°
133074 Rigan R31012/FZM/27W/80/A60	D115xH170xØ140mm±1mm	FZM	1530	27W	57	60°
133075 Rigan R31012/FSM/27W/80/A60	D115xH170xØ140mm±1mm	FSM	1530	27W	57	60°
133151 Rigan R31012/FSH/27W/80/A60	D115xH170xØ140mm±1mm	FSH	2250	27W	84	60°
133432 Rigan R31012/AMB2200/14W/80/A15	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	15°
133433 Rigan R31012/AMB2200/14W/80/A30	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	30°
133434 Rigan R31012/AMB2200/14W/80/A45	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	45°
133435 Rigan R31012/AMB2200/14W/80/A60	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	60°
133436 Rigan R31012/AMB2200/20W/80/A15	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	15°
133437 Rigan R31012/AMB2200/20W/80/A30	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	30°
133438 Rigan R31012/AMB2200/20W/80/A45	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	45°
133439 Rigan R31012/AMB2200/20W/80/A60	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	60°
133440 Rigan R31012/AMB2200/27W/80/A15	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	15°
133441 Rigan R31012/AMB2200/27W/80/A30	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	30°
133442 Rigan R31012/AMB2200/27W/80/A45	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	45°
133443 Rigan R31012/AMB2200/27W/80/A60	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	60°
CRI 93						
133272 Rigan R31012/AGI3000/12W/93/A15	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	15°
133273 Rigan R31012/AGI3500/12W/93/A15	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	15°
133274 Rigan R31012/AGI4000/12W/93/A15	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	15°
133275 Rigan R31012/AGI3000/12W/93/A30	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	30°
133276 Rigan R31012/AGI3500/12W/93/A30	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	30°
133277 Rigan R31012/AGI4000/12W/93/A30	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	30°
133278 Rigan R31012/AGI3000/12W/93/A45	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	45°
133279 Rigan R31012/AGI3500/12W/93/A45	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	45°
133280 Rigan R31012/AGI4000/12W/93/A45	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	45°
133281 Rigan R31012/AGI3000/12W/93/A60	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	60°
133282 Rigan R31012/AGI3500/12W/93/A60	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	60°
133283 Rigan R31012/AGI4000/12W/93/A60	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	60°
133284 Rigan R31012/AGI3000/17W/93/A15	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	15°
133285 Rigan R31012/AGI3500/17W/93/A15	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	15°
133286 Rigan R31012/AGI4000/17W/93/A15	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	15°
133287 Rigan R31012/AGI3000/17W/93/A30	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	30°
133288 Rigan R31012/AGI3500/17W/93/A30	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	30°
133289 Rigan R31012/AGI4000/17W/93/A30	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	30°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 93						
133290 Rigan R31012/AGI3000/17W/93/A45	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	45°
133291 Rigan R31012/AGI3500/17W/93/A45	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	45°
133292 Rigan R31012/AGI4000/17W/93/A45	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	45°
133293 Rigan R31012/AGI3000/17W/93/A60	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	60°
133294 Rigan R31012/AGI3500/17W/93/A60	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	60°
133295 Rigan R31012/AGI4000/17W/93/A60	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	60°
133296 Rigan R31012/AGI3000/23W/93/A15	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	15°
133297 Rigan R31012/AGI3500/23W/93/A15	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	15°
133298 Rigan R31012/AGI4000/23W/93/A15	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	15°
133299 Rigan R31012/AGI3000/23W/93/A30	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	30°
133300 Rigan R31012/AGI3500/23W/93/A30	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	30°
133301 Rigan R31012/AGI4000/23W/93/A30	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	30°
133302 Rigan R31012/AGI3000/23W/93/A45	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	45°
133303 Rigan R31012/AGI3500/23W/93/A45	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	45°
133304 Rigan R31012/AGI4000/23W/93/A45	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	45°
133305 Rigan R31012/AGI3000/23W/93/A60	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	60°
133306 Rigan R31012/AGI3500/23W/93/A60	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	60°
133307 Rigan R31012/AGI4000/23W/93/A60	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	60°
CRI 95						
133084 Rigan R31012/FAS/27W/95/A15	D115xH170xØ140mm±1mm	FAS	2080	27W	78	15°
133085 Rigan R31012/FAS/27W/95/A30	D115xH170xØ140mm±1mm	FAS	2080	27W	78	30°
133086 Rigan R31012/FAS/27W/95/A45	D115xH170xØ140mm±1mm	FAS	2080	27W	78	45°
133087 Rigan R31012/FAS/27W/95/A60	D115xH170xØ140mm±1mm	FAS	2080	27W	78	60°
CRI 98						
133156 Rigan R31012/ART3000/27W/98/A15	D115xH170xØ140mm±1mm	ART3000	1995	27W	74	15°
133157 Rigan R31012/ART3000/27W/98/A30	D115xH170xØ140mm±1mm	ART3000	1995	27W	74	30°
133158 Rigan R31012/ART3000/27W/98/A45	D115xH170xØ140mm±1mm	ART3000	1995	27W	74	45°
133159 Rigan R31012/ART3000/27W/98/A60	D115xH170xØ140mm±1mm	ART3000	1995	27W	74	60°

Technical specifications can be modified without prior notice. All information is property of Greentek Lighting.
 The presentation picture is for information purposes only. Latest document update: September 27, 2017 12:17 PM. www.greentek.eu