



Rigan

RECESSED DIRECTIONAL SPOTLIGHTS | ECO-DALI

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:

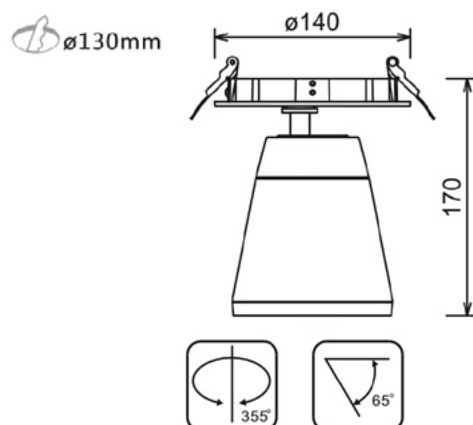
- Rigan TEC – the standard for any project in the retail sector
- Rigan ECO - DALI – with DALI controls for dimming
- Rigan EM – with emergency lighting kit
- Rigan ECO-EM – with both dimming and emergency kit

APPLICATION

Supermarket | Fashion | Retail | Hospitality | Exhibition | Arhitectural

FEATURES & BENEFITS

- CRI > 80 as standard, up to 98 for certain special color
- 16 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
- Dimmable



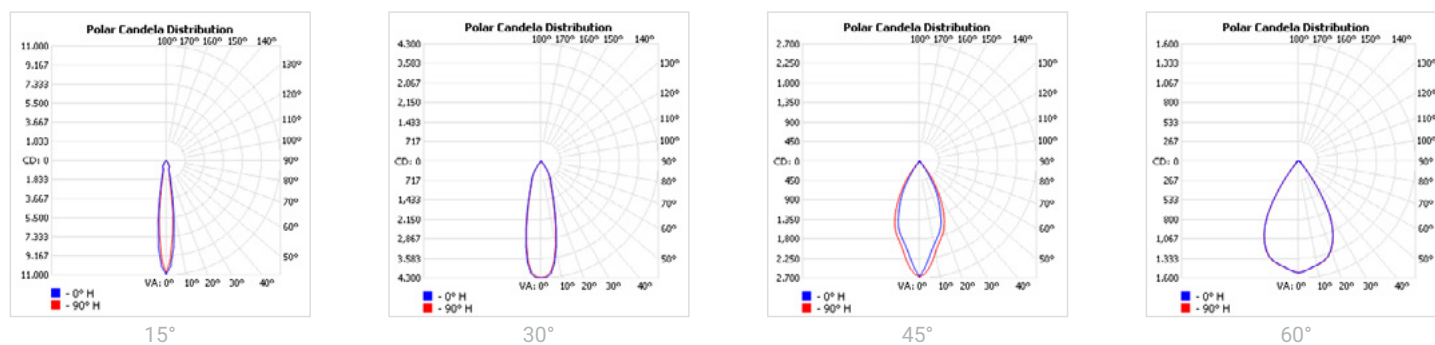
SPECIFICATIONS

Power consumption	12W, 14W, 17W, 20W, 21W, 23W, 27W
Dimensions	D115xH170xØ140mm±1mm (Cut out Ø130mm)
Weight	1.2 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	ECO-DALI
Warranty [years]	5
Storage temperature range [°C]	-20 ... +55 / -4F ... +131F
Emergency option	For more information please see RIGAN ECO-DALI 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						
233000 Rigan R31012/2700/14W/80/A15	D115xH170xØ140mm±1mm	2700	1485	14W	107	15°
233001 Rigan R31012/3000/14W/80/A15	D115xH170xØ140mm±1mm	3000	1500	14W	108	15°
233002 Rigan R31012/3500/14W/80/A15	D115xH170xØ140mm±1mm	3500	1540	14W	110	15°
233003 Rigan R31012/4000/14W/80/A15	D115xH170xØ140mm±1mm	4000	1570	14W	113	15°
233005 Rigan R31012/2700/14W/80/A30	D115xH170xØ140mm±1mm	2700	1485	14W	107	30°
233006 Rigan R31012/3000/14W/80/A30	D115xH170xØ140mm±1mm	3000	1500	14W	108	30°
233007 Rigan R31012/3500/14W/80/A30	D115xH170xØ140mm±1mm	3500	1540	14W	110	30°
233008 Rigan R31012/4000/14W/80/A30	D115xH170xØ140mm±1mm	4000	1570	14W	113	30°
233010 Rigan R31012/2700/14W/80/A45	D115xH170xØ140mm±1mm	2700	1485	14W	107	45°
233011 Rigan R31012/3000/14W/80/A45	D115xH170xØ140mm±1mm	3000	1500	14W	108	45°
233012 Rigan R31012/3500/14W/80/A45	D115xH170xØ140mm±1mm	3500	1540	14W	110	45°
233013 Rigan R31012/4000/14W/80/A45	D115xH170xØ140mm±1mm	4000	1570	14W	113	45°
233015 Rigan R31012/2700/14W/80/A60	D115xH170xØ140mm±1mm	2700	1485	14W	107	60°
233016 Rigan R31012/3000/14W/80/A60	D115xH170xØ140mm±1mm	3000	1500	14W	108	60°
233017 Rigan R31012/3500/14W/80/A60	D115xH170xØ140mm±1mm	3500	1540	14W	110	60°
233018 Rigan R31012/4000/14W/80/A60	D115xH170xØ140mm±1mm	4000	1570	14W	113	60°
233020 Rigan R31012/2700/20W/80/A15	D115xH170xØ140mm±1mm	2700	2080	20W	104	15°
233021 Rigan R31012/3000/20W/80/A15	D115xH170xØ140mm±1mm	3000	2100	20W	105	15°
233022 Rigan R31012/3500/20W/80/A15	D115xH170xØ140mm±1mm	3500	2160	20W	108	15°
233023 Rigan R31012/4000/20W/80/A15	D115xH170xØ140mm±1mm	4000	2200	20W	110	15°
233025 Rigan R31012/2700/20W/80/A30	D115xH170xØ140mm±1mm	2700	2080	20W	104	30°
233026 Rigan R31012/3000/20W/80/A30	D115xH170xØ140mm±1mm	3000	2100	20W	105	30°
233027 Rigan R31012/3500/20W/80/A30	D115xH170xØ140mm±1mm	3500	2160	20W	108	30°
233028 Rigan R31012/4000/20W/80/A30	D115xH170xØ140mm±1mm	4000	2200	20W	110	30°
233030 Rigan R31012/2700/20W/80/A45	D115xH170xØ140mm±1mm	2700	2080	20W	104	45°
233031 Rigan R31012/3000/20W/80/A45	D115xH170xØ140mm±1mm	3000	2100	20W	105	45°
233032 Rigan R31012/3500/20W/80/A45	D115xH170xØ140mm±1mm	3500	2160	20W	108	45°
233033 Rigan R31012/4000/20W/80/A45	D115xH170xØ140mm±1mm	4000	2200	20W	110	45°
233035 Rigan R31012/2700/20W/80/A60	D115xH170xØ140mm±1mm	2700	2080	20W	104	60°
233036 Rigan R31012/3000/20W/80/A60	D115xH170xØ140mm±1mm	3000	2100	20W	105	60°
233037 Rigan R31012/3500/20W/80/A60	D115xH170xØ140mm±1mm	3500	2160	20W	108	60°
233038 Rigan R31012/4000/20W/80/A60	D115xH170xØ140mm±1mm	4000	2200	20W	110	60°
233040 Rigan R31012/2700/27W/80/A15	D115xH170xØ140mm±1mm	2700	2945	27W	110	15°
233041 Rigan R31012/3000/27W/80/A15	D115xH170xØ140mm±1mm	3000	2970	27W	110	15°
233042 Rigan R31012/3500/27W/80/A15	D115xH170xØ140mm±1mm	3500	3055	27W	114	15°
233043 Rigan R31012/4000/27W/80/A15	D115xH170xØ140mm±1mm	4000	3135	27W	117	15°
233045 Rigan R31012/2700/27W/80/A30	D115xH170xØ140mm±1mm	2700	2945	27W	110	30°
233046 Rigan R31012/3000/27W/80/A30	D115xH170xØ140mm±1mm	3000	2970	27W	110	30°
233047 Rigan R31012/3500/27W/80/A30	D115xH170xØ140mm±1mm	3500	3055	27W	114	30°
233048 Rigan R31012/4000/27W/80/A30	D115xH170xØ140mm±1mm	4000	3135	27W	117	30°
233050 Rigan R31012/2700/27W/80/A45	D115xH170xØ140mm±1mm	2700	2945	27W	110	45°
233051 Rigan R31012/3000/27W/80/A45	D115xH170xØ140mm±1mm	3000	2970	27W	110	45°
233052 Rigan R31012/3500/27W/80/A45	D115xH170xØ140mm±1mm	3500	3055	27W	114	45°
233053 Rigan R31012/4000/27W/80/A45	D115xH170xØ140mm±1mm	4000	3135	27W	117	45°
233055 Rigan R31012/2700/27W/80/A60	D115xH170xØ140mm±1mm	2700	2945	27W	110	60°
233056 Rigan R31012/3000/27W/80/A60	D115xH170xØ140mm±1mm	3000	2970	27W	110	60°
233057 Rigan R31012/3500/27W/80/A60	D115xH170xØ140mm±1mm	3500	3055	27W	114	60°
233058 Rigan R31012/4000/27W/80/A60	D115xH170xØ140mm±1mm	4000	3135	27W	117	60°
233060 Rigan R31012/BVF/27W/80/A15	D115xH170xØ140mm±1mm	BVF	2065	27W	77	15°
233061 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						
233062 Rigan R31012/FZM/27W/80/A15	D115xH170xØ140mm±1mm	FZM	1530	27W	57	15°
233063 Rigan R31012/FSM/27W/80/A15	D115xH170xØ140mm±1mm	FSM	1530	27W	57	15°
233148 Rigan R31012/FSH/27W/80/A15	D115xH170xØ140mm±1mm	FSH	2250	27W	84	15°
233064 Rigan R31012/BVF/27W/80/A30	D115xH170xØ140mm±1mm	BVF	2065	27W	77	30°
233065 Rigan R31012/FBS/27W/80/A30	D115xH170xØ140mm±1mm	FBS	1635	27W	61	30°
233066 Rigan R31012/FZM/27W/80/A30	D115xH170xØ140mm±1mm	FZM	1530	27W	57	30°
233067 Rigan R31012/FSM/27W/80/A30	D115xH170xØ140mm±1mm	FSM	1530	27W	57	30°
233149 Rigan R31012/FSH/27W/80/A30	D115xH170xØ140mm±1mm	FSH	2250	27W	84	30°
233068 Rigan R31012/BVF/27W/80/A45	D115xH170xØ140mm±1mm	BVF	2065	27W	77	45°
233069 Rigan R31012/FBS/27W/80/A45	D115xH170xØ140mm±1mm	FBS	1635	27W	61	45°
233070 Rigan R31012/FZM/27W/80/A45	D115xH170xØ140mm±1mm	FZM	1530	27W	57	45°
233071 Rigan R31012/FSM/27W/80/A45	D115xH170xØ140mm±1mm	FSM	1530	27W	57	45°
233150 Rigan R31012/FSH/27W/80/A45	D115xH170xØ140mm±1mm	FSH	2250	27W	84	45°
233072 Rigan R31012/BVF/27W/80/A60	D115xH170xØ140mm±1mm	BVF	2065	27W	77	60°
233073 Rigan R31012/FBS/27W/80/A60	D115xH170xØ140mm±1mm	FBS	1635	27W	61	60°
233074 Rigan R31012/FZM/27W/80/A60	D115xH170xØ140mm±1mm	FZM	1530	27W	57	60°
233075 Rigan R31012/FSM/27W/80/A60	D115xH170xØ140mm±1mm	FSM	1530	27W	57	60°
233151 Rigan R31012/FSH/27W/80/A60	D115xH170xØ140mm±1mm	FSH	2250	27W	84	60°
233432 Rigan R31012/AMB2200/14W/80/A15	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	15°
233433 Rigan R31012/AMB2200/14W/80/A30	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	30°
233434 Rigan R31012/AMB2200/14W/80/A45	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	45°
233435 Rigan R31012/AMB2200/14W/80/A60	D115xH170xØ140mm±1mm	AMB2200	1020	14W	73	60°
233436 Rigan R31012/AMB2200/20W/80/A15	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	15°
233437 Rigan R31012/AMB2200/20W/80/A30	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	30°
233438 Rigan R31012/AMB2200/20W/80/A45	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	45°
233439 Rigan R31012/AMB2200/20W/80/A60	D115xH170xØ140mm±1mm	AMB2200	1410	20W	71	60°
233440 Rigan R31012/AMB2200/27W/80/A15	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	15°
233441 Rigan R31012/AMB2200/27W/80/A30	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	30°
233442 Rigan R31012/AMB2200/27W/80/A45	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	45°
233443 Rigan R31012/AMB2200/27W/80/A60	D115xH170xØ140mm±1mm	AMB2200	1870	27W	70	60°
CRI 90						
233444 Rigan R31012/SUNSET/21W/90/A15	D115xH170xØ140mm±1mm	SUNSET	1350	21W	65	15°
233445 Rigan R31012/SUNSET/21W/90/A30	D115xH170xØ140mm±1mm	SUNSET	1350	21W	65	30°
233446 Rigan R31012/SUNSET/21W/90/A45	D115xH170xØ140mm±1mm	SUNSET	1350	21W	65	45°
233447 Rigan R31012/SUNSET/21W/90/A60	D115xH170xØ140mm±1mm	SUNSET	1350	21W	65	60°
CRI 93						
233272 Rigan R31012/AGI3000/12W/93/A15	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	15°
233273 Rigan R31012/AGI3500/12W/93/A15	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	15°
233274 Rigan R31012/AGI4000/12W/93/A15	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	15°
233275 Rigan R31012/AGI3000/12W/93/A30	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	30°
233276 Rigan R31012/AGI3500/12W/93/A30	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	30°
233277 Rigan R31012/AGI4000/12W/93/A30	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	30°
233278 Rigan R31012/AGI3000/12W/93/A45	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	45°
233279 Rigan R31012/AGI3500/12W/93/A45	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	45°
233280 Rigan R31012/AGI4000/12W/93/A45	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	45°
233281 Rigan R31012/AGI3000/12W/93/A60	D115xH170xØ140mm±1mm	AGI3000	735	12W	62	60°
233282 Rigan R31012/AGI3500/12W/93/A60	D115xH170xØ140mm±1mm	AGI3500	780	12W	65	60°
233283 Rigan R31012/AGI4000/12W/93/A60	D115xH170xØ140mm±1mm	AGI4000	830	12W	70	60°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 93						
233284 Rigan R31012/AGI3000/17W/93/A15	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	15°
233285 Rigan R31012/AGI3500/17W/93/A15	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	15°
233286 Rigan R31012/AGI4000/17W/93/A15	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	15°
233287 Rigan R31012/AGI3000/17W/93/A30	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	30°
233288 Rigan R31012/AGI3500/17W/93/A30	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	30°
233289 Rigan R31012/AGI4000/17W/93/A30	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	30°
233290 Rigan R31012/AGI3000/17W/93/A45	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	45°
233291 Rigan R31012/AGI3500/17W/93/A45	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	45°
233292 Rigan R31012/AGI4000/17W/93/A45	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	45°
233293 Rigan R31012/AGI3000/17W/93/A60	D115xH170xØ140mm±1mm	AGI3000	985	17W	58	60°
233294 Rigan R31012/AGI3500/17W/93/A60	D115xH170xØ140mm±1mm	AGI3500	1050	17W	62	60°
233295 Rigan R31012/AGI4000/17W/93/A60	D115xH170xØ140mm±1mm	AGI4000	1115	17W	66	60°
233296 Rigan R31012/AGI3000/23W/93/A15	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	15°
233297 Rigan R31012/AGI3500/23W/93/A15	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	15°
233298 Rigan R31012/AGI4000/23W/93/A15	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	15°
233299 Rigan R31012/AGI3000/23W/93/A30	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	30°
233300 Rigan R31012/AGI3500/23W/93/A30	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	30°
233301 Rigan R31012/AGI4000/23W/93/A30	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	30°
233302 Rigan R31012/AGI3000/23W/93/A45	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	45°
233303 Rigan R31012/AGI3500/23W/93/A45	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	45°
233304 Rigan R31012/AGI4000/23W/93/A45	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	45°
233305 Rigan R31012/AGI3000/23W/93/A60	D115xH170xØ140mm±1mm	AGI3000	1330	23W	58	60°
233306 Rigan R31012/AGI3500/23W/93/A60	D115xH170xØ140mm±1mm	AGI3500	1440	23W	63	60°
233307 Rigan R31012/AGI4000/23W/93/A60	D115xH170xØ140mm±1mm	AGI4000	1550	23W	68	60°
CRI 95						
233084 Rigan R31012/FAS/27W/95/A15	D115xH170xØ140mm±1mm	FAS	2080	27W	78	15°
233085 Rigan R31012/FAS/27W/95/A30	D115xH170xØ140mm±1mm	FAS	2080	27W	78	30°
233086 Rigan R31012/FAS/27W/95/A45	D115xH170xØ140mm±1mm	FAS	2080	27W	78	45°
233087 Rigan R31012/FAS/27W/95/A60	D115xH170xØ140mm±1mm	FAS	2080	27W	78	60°
CRI 98						
233156 Rigan R31012/ART3000/27W/98/A15	D115xH170xØ140mm±1mm	ART3000	1995	27W	74	15°
233157 Rigan R31012/ART3000/27W/98/A30	D115xH170xØ140mm±1mm	ART3000	1995	27W	74	30°
233158 Rigan R31012/ART3000/27W/98/A45	D115xH170xØ140mm±1mm	ART3000	1995	27W	74	45°
233159 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.

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