



Empire R IP44

RECESSED DOWNLIGHTS | NON-DALI SERIES

Empire R IP44 is a round recessed luminaire with three different diameters. Easy to install thanks to a clever mechanism. Provides the perfect combination of efficiency, light comfort, and design, without compromising on lighting performance. COB technology makes this line suitable for accent lighting and for special temperature colors. The housing comes in three color options- signal white, jet black and white aluminum – to fit all the particular environments.

Empire R IP44 recessed luminaires come in several series, with various add-on and controls:

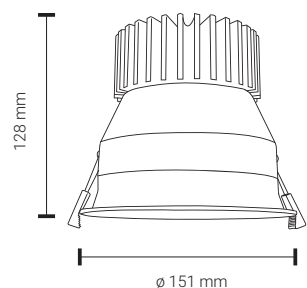
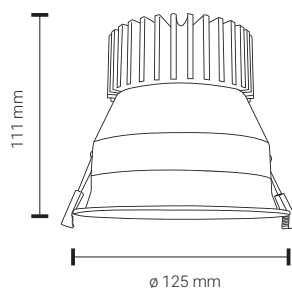
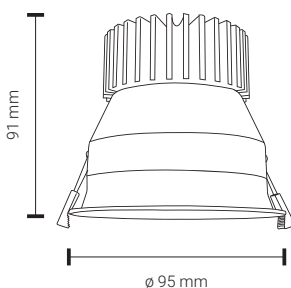
- Empire R IP 44 Non-DALI – the standard for any project in the retail, health or hospitality sectors
- Empire R IP44 Non-DALI EM – with emergency lighting kit of 1h and 3 h
- Empire R IP44 DALI – with DALI controls for illumination adjustments
- Empire R IP44 DALI EM - with both dimming and emergency kit

FEATURES & BENEFITS

- CRI ≥ 80 as standard, up to 98 for specific special color temperatures
- 15 color temperatures, specialized options included
- Luminaire efficiency: 110lm/W @4000K
- Optics – three angles 25°, 45°, 50°
- IP factor: IP20, IP44 for front face only
- Dimmable (only for DALI and DALI EM Series)

APPLICATION

Grocery & Supermarkets | Retail | Office | Healthcare | Hospitality | DIY



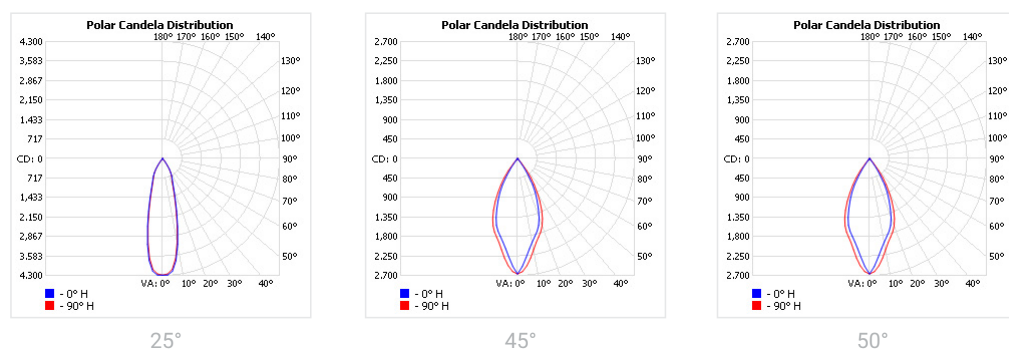
SPECIFICATIONS

Power consumption	12W, 14W, 17W, 20W	12W, 14W, 17W, 20W, 23W, 27W	12W, 14W, 17W, 20W, 23W, 27W
Dimensions	D95xH91xØ85mm±1mm	D125xH111xØ115mm±1mm	D151xH128xØ140mm±1mm
Weight	0.5 Kg	0.6 Kg	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°C ... +45°C / -4F ... +113F		
Operating humidity [%]	10 ÷ 85		
Power factor	≥0.95		
AC Input [Vac]	220 - 240 VAC		
Lens angle [°]	25°, 45°, 50°		
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 (front face)	IP20 (IP44)		
Control optional	-		
Warranty [years]	5		
Storage temperature range [°C]	-20°C ... +55°C / -4F ... +131F		
Emergency option	-		

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

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

LIGHT DISTRIBUTION



TOLERANCES

Luminous flux tolerances: -/+ 5%

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

BATTERY WARRANTY

Non-DALI EM & DALI EM: 12 months warranty

Non-DALI & DALI: -

MAXIMUM NO. OF LUMINAIRES ON A CIRCUIT

Luminaire Power(W)	Control type	Circuit Breaker Type					
		B			C		
		20	16	10	20	16	10
8-20W	Non-DALI	62	50	31	104	85	52
23-35W	Non-DALI	24	20	10	47	40	20
42W	Non-DALI	20	16	8	38	32	16
8-20W	DALI	62	50	31	104	85	52
23-27W	DALI	25	21	13	50	42	26
34-42W	DALI	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
CRI90	RG1
CRI95	RG1
ENT	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						
194000 EmpireR IP44 D33001/2700/14W/80/A25	D95xH91xØ85mm±1mm	2700	1200	14W	86	25°
194001 EmpireR IP44 D33001/3000/14W/80/A25	D95xH91xØ85mm±1mm	3000	1215	14W	87	25°
194002 EmpireR IP44 D33001/3500/14W/80/A25	D95xH91xØ85mm±1mm	3500	1245	14W	89	25°
194003 EmpireR IP44 D33001/4000/14W/80/A25	D95xH91xØ85mm±1mm	4000	1270	14W	91	25°
194005 EmpireR IP44 D33001/2700/14W/80/A45	D95xH91xØ85mm±1mm	2700	1200	14W	86	45°
194006 EmpireR IP44 D33001/3000/14W/80/A45	D95xH91xØ85mm±1mm	3000	1215	14W	87	45°
194007 EmpireR IP44 D33001/3500/14W/80/A45	D95xH91xØ85mm±1mm	3500	1245	14W	89	45°
194008 EmpireR IP44 D33001/4000/14W/80/A45	D95xH91xØ85mm±1mm	4000	1270	14W	91	45°
194010 EmpireR IP44 D33001/2700/20W/80/A25	D95xH91xØ85mm±1mm	2700	1650	20W	83	25°
194011 EmpireR IP44 D33001/3000/20W/80/A25	D95xH91xØ85mm±1mm	3000	1665	20W	84	25°
194012 EmpireR IP44 D33001/3500/20W/80/A25	D95xH91xØ85mm±1mm	3500	1710	20W	86	25°
194013 EmpireR IP44 D33001/4000/20W/80/A25	D95xH91xØ85mm±1mm	4000	1745	20W	88	25°
194015 EmpireR IP44 D33001/2700/20W/80/A45	D95xH91xØ85mm±1mm	2700	1650	20W	83	45°
194016 EmpireR IP44 D33001/3000/20W/80/A45	D95xH91xØ85mm±1mm	3000	1665	20W	84	45°
194017 EmpireR IP44 D33001/3500/20W/80/A45	D95xH91xØ85mm±1mm	3500	1710	20W	86	45°
194018 EmpireR IP44 D33001/4000/20W/80/A45	D95xH91xØ85mm±1mm	4000	1745	20W	88	45°
194020 EmpireR IP44 D33002/2700/14W/80/A45	D125xH111xØ115mm±1mm	2700	1440	14W	103	45°
194021 EmpireR IP44 D33002/3000/14W/80/A45	D125xH111xØ115mm±1mm	3000	1455	14W	104	45°
194022 EmpireR IP44 D33002/3500/14W/80/A45	D125xH111xØ115mm±1mm	3500	1495	14W	107	45°
194023 EmpireR IP44 D33002/4000/14W/80/A45	D125xH111xØ115mm±1mm	4000	1525	14W	109	45°
194025 EmpireR IP44 D33002/2700/20W/80/A45	D125xH111xØ115mm±1mm	2700	2010	20W	101	45°
194026 EmpireR IP44 D33002/3000/20W/80/A45	D125xH111xØ115mm±1mm	3000	2025	20W	102	45°
194027 EmpireR IP44 D33002/3500/20W/80/A45	D125xH111xØ115mm±1mm	3500	2080	20W	104	45°
194028 EmpireR IP44 D33002/4000/20W/80/A45	D125xH111xØ115mm±1mm	4000	2120	20W	106	45°
194030 EmpireR IP44 D33002/2700/27W/80/A45	D125xH111xØ115mm±1mm	2700	2805	27W	104	45°
194031 EmpireR IP44 D33002/3000/27W/80/A45	D125xH111xØ115mm±1mm	3000	2830	27W	105	45°
194032 EmpireR IP44 D33002/3500/27W/80/A45	D125xH111xØ115mm±1mm	3500	2905	27W	108	45°
194033 EmpireR IP44 D33002/4000/27W/80/A45	D125xH111xØ115mm±1mm	4000	2965	27W	110	45°
194035 EmpireR IP44 D33003/2700/14W/80/A50	D151xH128xØ140mm±1mm	2700	1440	14W	103	50°
194036 EmpireR IP44 D33003/3000/14W/80/A50	D151xH128xØ140mm±1mm	3000	1455	14W	104	50°
194037 EmpireR IP44 D33003/3500/14W/80/A50	D151xH128xØ140mm±1mm	3500	1495	14W	107	50°
194038 EmpireR IP44 D33003/4000/14W/80/A50	D151xH128xØ140mm±1mm	4000	1525	14W	109	50°
194040 EmpireR IP44 D33003/2700/20W/80/A50	D151xH128xØ140mm±1mm	2700	2010	20W	101	50°
194041 EmpireR IP44 D33003/3000/20W/80/A50	D151xH128xØ140mm±1mm	3000	2025	20W	102	50°
194042 EmpireR IP44 D33003/3500/20W/80/A50	D151xH128xØ140mm±1mm	3500	2080	20W	104	50°
194043 EmpireR IP44 D33003/4000/20W/80/A50	D151xH128xØ140mm±1mm	4000	2120	20W	106	50°
194045 EmpireR IP44 D33003/2700/27W/80/A50	D151xH128xØ140mm±1mm	2700	2805	27W	104	50°
194046 EmpireR IP44 D33003/3000/27W/80/A50	D151xH128xØ140mm±1mm	3000	2830	27W	105	50°
194047 EmpireR IP44 D33003/3500/27W/80/A50	D151xH128xØ140mm±1mm	3500	2905	27W	108	50°
194048 EmpireR IP44 D33003/4000/27W/80/A50	D151xH128xØ140mm±1mm	4000	2965	27W	110	50°
194270 EmpireR IP44 D33001/AMB2200/14W/80/A25	D95xH91xØ85mm±1mm	AMB2200	915	14W	66	25°
194271 EmpireR IP44 D33001/AMB2200/20W/80/A25	D95xH91xØ85mm±1mm	AMB2200	1270	20W	64	25°
194272 EmpireR IP44 D33001/AMB2200/14W/80/A45	D95xH91xØ85mm±1mm	AMB2200	915	14W	66	45°
194273 EmpireR IP44 D33001/AMB2200/20W/80/A45	D95xH91xØ85mm±1mm	AMB2200	1270	20W	64	45°
194274 EmpireR IP44 D33002/AMB2200/14W/80/A45	D125xH111xØ115mm±1mm	AMB2200	1020	14W	73	45°
194275 EmpireR IP44 D33002/AMB2200/20W/80/A45	D125xH111xØ115mm±1mm	AMB2200	1410	20W	71	45°
194276 EmpireR IP44 D33002/AMB2200/27W/80/A45	D125xH111xØ115mm±1mm	AMB2200	1870	27W	70	45°
194277 EmpireR IP44 D33003/AMB2200/14W/80/A50	D151xH128xØ140mm±1mm	AMB2200	1020	14W	73	50°
194278 EmpireR IP44 D33003/AMB2200/20W/80/A50	D151xH128xØ140mm±1mm	AMB2200	1410	20W	71	50°
194279 EmpireR IP44 D33003/AMB2200/27W/80/A50	D151xH128xØ140mm±1mm	AMB2200	1870	27W	70	50°
194284 EmpireR IP44 D33002/BVF/14W/80/A45	D125xH111xØ115mm±1mm	BVF	1225	14W	88	45°
194285 EmpireR IP44 D33002/FBS/14W/80/A45	D125xH111xØ115mm±1mm	FBS	830	14W	60	45°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
194286 EmpireR IP44 D33002/FZM/14W/80/A45	D125xH111xØ115mm±1mm	FZM	800	14W	58	45°
194287 EmpireR IP44 D33002/FSM/14W/80/A45	D125xH111xØ115mm±1mm	FSM	830	14W	60	45°
194288 EmpireR IP44 D33002/FSH/14W/80/A45	D125xH111xØ115mm±1mm	FSH	1180	14W	85	45°
194289 EmpireR IP44 D33002/BVF/20W/80/A45	D125xH111xØ115mm±1mm	BVF	1675	20W	84	45°
194290 EmpireR IP44 D33002/FBS/20W/80/A45	D125xH111xØ115mm±1mm	FBS	1155	20W	58	45°
194291 EmpireR IP44 D33002/FZM/20W/80/A45	D125xH111xØ115mm±1mm	FZM	1105	20W	56	45°
194292 EmpireR IP44 D33002/FSM/20W/80/A45	D125xH111xØ115mm±1mm	FSM	1130	20W	57	45°
194293 EmpireR IP44 D33002/FSH/20W/80/A45	D125xH111xØ115mm±1mm	FSH	1640	20W	82	45°
194294 EmpireR IP44 D33002/BVF/27W/80/A45	D125xH111xØ115mm±1mm	BVF	2220	27W	83	45°
194295 EmpireR IP44 D33002/FBS/27W/80/A45	D125xH111xØ115mm±1mm	FBS	1515	27W	57	45°
194296 EmpireR IP44 D33002/FZM/27W/80/A45	D125xH111xØ115mm±1mm	FZM	1455	27W	54	45°
194297 EmpireR IP44 D33002/FSM/27W/80/A45	D125xH111xØ115mm±1mm	FSM	1480	27W	55	45°
194298 EmpireR IP44 D33002/FSH/27W/80/A45	D125xH111xØ115mm±1mm	FSH	2170	27W	81	45°
194299 EmpireR IP44 D33003/BVF/14W/80/A50	D151xH128xØ140mm±1mm	BVF	1225	14W	88	50°
194300 EmpireR IP44 D33003/FBS/14W/80/A50	D151xH128xØ140mm±1mm	FBS	830	14W	60	50°
194301 EmpireR IP44 D33003/FZM/14W/80/A50	D151xH128xØ140mm±1mm	FZM	800	14W	58	50°
194302 EmpireR IP44 D33003/FSM/14W/80/A50	D151xH128xØ140mm±1mm	FSM	830	14W	60	50°
194303 EmpireR IP44 D33003/FSH/14W/80/A50	D151xH128xØ140mm±1mm	FSH	1180	14W	85	50°
194304 EmpireR IP44 D33003/BVF/20W/80/A50	D151xH128xØ140mm±1mm	BVF	1675	20W	84	50°
194305 EmpireR IP44 D33003/FBS/20W/80/A50	D151xH128xØ140mm±1mm	FBS	1155	20W	58	50°
194306 EmpireR IP44 D33003/FZM/20W/80/A50	D151xH128xØ140mm±1mm	FZM	1105	20W	56	50°
194307 EmpireR IP44 D33003/FSM/20W/80/A50	D151xH128xØ140mm±1mm	FSM	1130	20W	57	50°
194308 EmpireR IP44 D33003/FSH/20W/80/A50	D151xH128xØ140mm±1mm	FSH	1640	20W	82	50°
194309 EmpireR IP44 D33003/BVF/27W/80/A50	D151xH128xØ140mm±1mm	BVF	2220	27W	83	50°
194310 EmpireR IP44 D33003/FBS/27W/80/A50	D151xH128xØ140mm±1mm	FBS	1515	27W	57	50°
194311 EmpireR IP44 D33003/FZM/27W/80/A50	D151xH128xØ140mm±1mm	FZM	1455	27W	54	50°
194312 EmpireR IP44 D33003/FSM/27W/80/A50	D151xH128xØ140mm±1mm	FSM	1480	27W	55	50°
194313 EmpireR IP44 D33003/FSH/27W/80/A50	D151xH128xØ140mm±1mm	FSH	2170	27W	81	50°
CRI 93						
194180 EmpireR IP44 D33001/AGI3000/12W/93/A25	D95xH91xØ85mm±1mm	AGI3000	735	12W	62	25°
194181 EmpireR IP44 D33001/AGI3500/12W/93/A25	D95xH91xØ85mm±1mm	AGI3500	780	12W	65	25°
194182 EmpireR IP44 D33001/AGI4000/12W/93/A25	D95xH91xØ85mm±1mm	AGI4000	830	12W	70	25°
194183 EmpireR IP44 D33001/AGI3000/12W/93/A45	D95xH91xØ85mm±1mm	AGI3000	735	12W	62	45°
194184 EmpireR IP44 D33001/AGI3500/12W/93/A45	D95xH91xØ85mm±1mm	AGI3500	780	12W	65	45°
194185 EmpireR IP44 D33001/AGI4000/12W/93/A45	D95xH91xØ85mm±1mm	AGI4000	830	12W	70	45°
194186 EmpireR IP44 D33001/AGI3000/17W/93/A25	D95xH91xØ85mm±1mm	AGI3000	985	17W	58	25°
194187 EmpireR IP44 D33001/AGI3500/17W/93/A25	D95xH91xØ85mm±1mm	AGI3500	1050	17W	62	25°
194188 EmpireR IP44 D33001/AGI4000/17W/93/A25	D95xH91xØ85mm±1mm	AGI4000	1115	17W	66	25°
194189 EmpireR IP44 D33001/AGI3000/17W/93/A45	D95xH91xØ85mm±1mm	AGI3000	985	17W	58	45°
194190 EmpireR IP44 D33001/AGI3500/17W/93/A45	D95xH91xØ85mm±1mm	AGI3500	1050	17W	62	45°
194191 EmpireR IP44 D33001/AGI4000/17W/93/A45	D95xH91xØ85mm±1mm	AGI4000	1115	17W	66	45°
194192 EmpireR IP44 D33002/AGI3000/12W/93/A45	D125xH111xØ115mm±1mm	AGI3000	735	12W	62	45°
194193 EmpireR IP44 D33002/AGI3500/12W/93/A45	D125xH111xØ115mm±1mm	AGI3500	780	12W	65	45°
194194 EmpireR IP44 D33002/AGI4000/12W/93/A45	D125xH111xØ115mm±1mm	AGI4000	830	12W	70	45°
194195 EmpireR IP44 D33002/AGI3000/17W/93/A45	D125xH111xØ115mm±1mm	AGI3000	985	17W	58	45°
194196 EmpireR IP44 D33002/AGI3500/17W/93/A45	D125xH111xØ115mm±1mm	AGI3500	1050	17W	62	45°
194197 EmpireR IP44 D33002/AGI4000/17W/93/A45	D125xH111xØ115mm±1mm	AGI4000	1115	17W	66	45°
194198 EmpireR IP44 D33002/AGI3000/23W/93/A45	D125xH111xØ115mm±1mm	AGI3000	1330	23W	58	45°
194199 EmpireR IP44 D33002/AGI3500/23W/93/A45	D125xH111xØ115mm±1mm	AGI3500	1440	23W	63	45°
194200 EmpireR IP44 D33002/AGI4000/23W/93/A45	D125xH111xØ115mm±1mm	AGI4000	1550	23W	68	45°
194201 EmpireR IP44 D33003/AGI3000/12W/93/A50	D151xH128xØ140mm±1mm	AGI3000	735	12W	62	50°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 93						
194202 EmpireR IP44 D33003/AGI3500/12W/93/A50	D151xH128xØ140mm±1mm	AGI3500	780	12W	65	50°
194203 EmpireR IP44 D33003/AGI4000/12W/93/A50	D151xH128xØ140mm±1mm	AGI4000	830	12W	70	50°
194204 EmpireR IP44 D33003/AGI3000/17W/93/A50	D151xH128xØ140mm±1mm	AGI3000	985	17W	58	50°
194205 EmpireR IP44 D33003/AGI3500/17W/93/A50	D151xH128xØ140mm±1mm	AGI3500	1050	17W	62	50°
194206 EmpireR IP44 D33003/AGI4000/17W/93/A50	D151xH128xØ140mm±1mm	AGI4000	1115	17W	66	50°
194207 EmpireR IP44 D33003/AGI3000/23W/93/A50	D151xH128xØ140mm±1mm	AGI3000	1330	23W	58	50°
194208 EmpireR IP44 D33003/AGI3500/23W/93/A50	D151xH128xØ140mm±1mm	AGI3500	1440	23W	63	50°
194209 EmpireR IP44 D33003/AGI4000/23W/93/A50	D151xH128xØ140mm±1mm	AGI4000	1550	23W	68	50°
CRI 95						
194150 EmpireR IP44 D33001/FAS/14W/95/A25	D95xH91xØ85mm±1mm	FAS	1045	14W	75	25°
194151 EmpireR IP44 D33001/FAS/14W/95/A45	D95xH91xØ85mm±1mm	FAS	1045	14W	75	45°
194152 EmpireR IP44 D33001/FAS/20W/95/A25	D95xH91xØ85mm±1mm	FAS	1430	20W	72	25°
194153 EmpireR IP44 D33001/FAS/20W/95/A45	D95xH91xØ85mm±1mm	FAS	1430	20W	72	45°
194154 EmpireR IP44 D33002/FAS/14W/95/A45	D125xH111xØ115mm±1mm	FAS	1165	14W	84	45°
194155 EmpireR IP44 D33002/FAS/20W/95/A45	D125xH111xØ115mm±1mm	FAS	1610	20W	81	45°
194156 EmpireR IP44 D33002/FAS/27W/95/A45	D125xH111xØ115mm±1mm	FAS	2335	27W	87	45°
194157 EmpireR IP44 D33003/FAS/14W/95/A50	D151xH128xØ140mm±1mm	FAS	1165	14W	84	50°
194158 EmpireR IP44 D33003/FAS/20W/95/A50	D151xH128xØ140mm±1mm	FAS	1610	20W	81	50°
194159 EmpireR IP44 D33003/FAS/27W/95/A50	D151xH128xØ140mm±1mm	FAS	2335	27W	87	50°
CRI 98						
194375 EmpireR IP44 D33002/ART3000/14W/98/A45	D125xH111xØ115mm±1mm	ART3000	1160	14W	83	45°
194377 EmpireR IP44 D33002/ART3000/20W/98/A45	D125xH111xØ115mm±1mm	ART3000	1600	20W	80	45°
194379 EmpireR IP44 D33002/ART3000/27W/98/A45	D125xH111xØ115mm±1mm	ART3000	2155	27W	80	45°
194381 EmpireR IP44 D33003/ART3000/14W/98/A50	D151xH128xØ140mm±1mm	ART3000	1160	14W	83	50°
194383 EmpireR IP44 D33003/ART3000/20W/98/A50	D151xH128xØ140mm±1mm	ART3000	1600	20W	80	50°
194385 EmpireR IP44 D33003/ART3000/27W/98/A50	D151xH128xØ140mm±1mm	ART3000	2155	27W	80	50°