



Empire S

RECESSED DOWNLIGHTS & SPOTLIGHTS | TEC

With an elegant square encasing, Empire S provides a beautiful accent lighting. Lens angles of 25, 45 or 50 degrees. It comes in three diameters, thus suitable to replace any type of conventional ceiling lamps. Can be equipped with a large range of special colors for food, fashion, art, hospitality and AGI.

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

- **Empire S TEC – the standard for any project in the retail and health sectors**

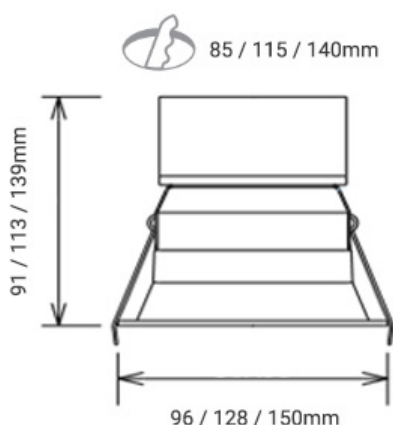
- Empire S TEC-EM – with emergency lighting kit
- Empire S ECO-DALI – with DALI controls for dimming
- Empire S ECO-EM - with both dimming and emergency kit

APPLICATION

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

FEATURES & BENEFITS

- CRI ≥80 as standard, up to 98 for specific special color temperatures
- 15 color temperatures, specialized options included
- Luminaire efficiency: 117 lm/W @4000K
- Optics: 25°, 45°, 50°
- IP factor: IP20, IP40 for front face only
- Dimmable (for ECO series)
- With emergency kits of 1h and 3 h (for EM series only)



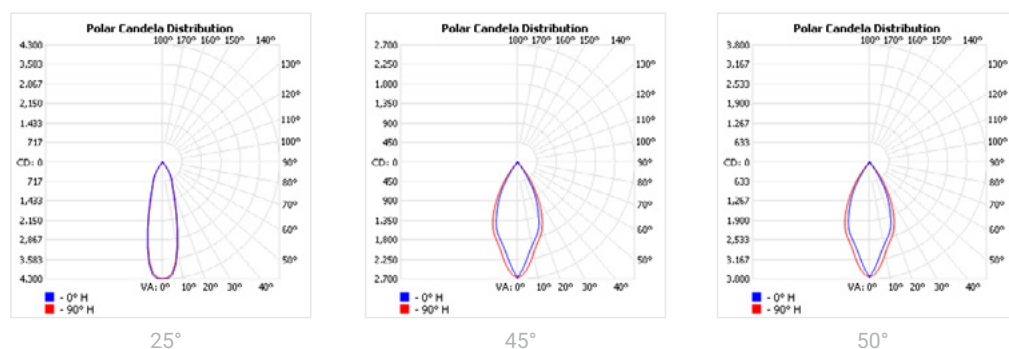
SPECIFICATIONS

Power consumption	12W, 14W, 17W, 20W, 23W, 27W
Dimensions	96x96xH91mm / 128x128xH113mm / 150x150xH139mm
Weight	0.5 / 0.8 / 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 [°]	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	IP20
Control optional	For more information please see EMPIRE S ECO-DALI datasheet
Warranty [years]	5
Storage temperature range [°C]	-20 ... +55 °C / -4F ... +131F
Emergency option	For more information please see EMPIRE S 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						
106000 EmpireS D35000/2700/14W/80/A25	96x96xH91±1mm	2700	1485	14W	107	25°
106001 EmpireS D35000/3000/14W/80/A25	96x96xH91±1mm	3000	1500	14W	108	25°
106002 EmpireS D35000/3500/14W/80/A25	96x96xH91±1mm	3500	1540	14W	110	25°
106003 EmpireS D35000/4000/14W/80/A25	96x96xH91±1mm	4000	1570	14W	113	25°
106005 EmpireS D35000/2700/14W/80/A45	96x96xH91±1mm	2700	1485	14W	107	45°
106006 EmpireS D35000/3000/14W/80/A45	96x96xH91±1mm	3000	1500	14W	108	45°
106007 EmpireS D35000/3500/14W/80/A45	96x96xH91±1mm	3500	1540	14W	110	45°
106008 EmpireS D35000/4000/14W/80/A45	96x96xH91±1mm	4000	1570	14W	113	45°
106010 EmpireS D35000/2700/20W/80/A25	96x96xH91±1mm	2700	2080	20W	104	25°
106011 EmpireS D35000/3000/20W/80/A25	96x96xH91±1mm	3000	2100	20W	105	25°
106012 EmpireS D35000/3500/20W/80/A25	96x96xH91±1mm	3500	2160	20W	108	25°
106013 EmpireS D35000/4000/20W/80/A25	96x96xH91±1mm	4000	2200	20W	110	25°
106015 EmpireS D35000/2700/20W/80/A45	96x96xH91±1mm	2700	2080	20W	104	45°
106016 EmpireS D35000/3000/20W/80/A45	96x96xH91±1mm	3000	2100	20W	105	45°
106017 EmpireS D35000/3500/20W/80/A45	96x96xH91±1mm	3500	2160	20W	108	45°
106018 EmpireS D35000/4000/20W/80/A45	96x96xH91±1mm	4000	2200	20W	110	45°
106020 EmpireS D35001/2700/14W/80/A45	128x128xH113x±1mm	2700	1485	14W	107	45°
106021 EmpireS D35001/3000/14W/80/A45	128x128xH113x±1mm	3000	1500	14W	108	45°
106022 EmpireS D35001/3500/14W/80/A45	128x128xH113x±1mm	3500	1540	14W	110	45°
106023 EmpireS D35001/4000/14W/80/A45	128x128xH113x±1mm	4000	1570	14W	113	45°
106025 EmpireS D35001/2700/20W/80/A45	128x128xH113x±1mm	2700	2080	20W	104	45°
106026 EmpireS D35001/3000/20W/80/A45	128x128xH113x±1mm	3000	2100	20W	105	45°
106027 EmpireS D35001/3500/20W/80/A45	128x128xH113x±1mm	3500	2160	20W	108	45°
106028 EmpireS D35001/4000/20W/80/A45	128x128xH113x±1mm	4000	2200	20W	110	45°
106030 EmpireS D35001/2700/27W/80/A45	128x128xH113x±1mm	2700	2945	27W	110	45°
106031 EmpireS D35001/3000/27W/80/A45	128x128xH113x±1mm	3000	2970	27W	110	45°
106032 EmpireS D35001/3500/27W/80/A45	128x128xH113x±1mm	3500	3055	27W	114	45°
106033 EmpireS D35001/4000/27W/80/A45	128x128xH113x±1mm	4000	3135	27W	117	45°
106035 EmpireS D35002/2700/14W/80/A50	150x150xH139±1mm	2700	1485	14W	107	50°
106036 EmpireS D35002/3000/14W/80/A50	150x150xH139±1mm	3000	1500	14W	108	50°
106037 EmpireS D35002/3500/14W/80/A50	150x150xH139±1mm	3500	1540	14W	110	50°
106038 EmpireS D35002/4000/14W/80/A50	150x150xH139±1mm	4000	1570	14W	113	50°
106040 EmpireS D35002/2700/20W/80/A50	150x150xH139±1mm	2700	2080	20W	104	50°
106041 EmpireS D35002/3000/20W/80/A50	150x150xH139±1mm	3000	2100	20W	105	50°
106042 EmpireS D35002/3500/20W/80/A50	150x150xH139±1mm	3500	2160	20W	108	50°
106043 EmpireS D35002/4000/20W/80/A50	150x150xH139±1mm	4000	2200	20W	110	50°
106045 EmpireS D35002/2700/27W/80/A50	150x150xH139±1mm	2700	2945	27W	110	50°
106046 EmpireS D35002/3000/27W/80/A50	150x150xH139±1mm	3000	2970	27W	110	50°
106047 EmpireS D35002/3500/27W/80/A50	150x150xH139±1mm	3500	3055	27W	114	50°
106048 EmpireS D35002/4000/27W/80/A50	150x150xH139±1mm	4000	3135	27W	117	50°
106060 EmpireS D35001/BVF/27W/80/A45	128x128xH113x±1mm	BVF	2065	27W	77	45°
106061 EmpireS D35001/FBS/27W/80/A45	128x128xH113x±1mm	FBS	1635	27W	61	45°
106062 EmpireS D35001/FZM/27W/80/A45	128x128xH113x±1mm	FZM	1530	27W	57	45°
106063 EmpireS D35001/FSM/27W/80/A45	128x128xH113x±1mm	FSM	1530	27W	57	45°
106122 EmpireS D35001/FSH/27W/80/A45	128x128xH113x±1mm	FSH	2250	27W	84	45°
106064 EmpireS D35002/BVF/27W/80/A50	150x150xH139±1mm	BVF	2065	27W	77	50°
106065 EmpireS D35002/FBS/27W/80/A50	150x150xH139±1mm	FBS	1635	27W	61	50°
106066 EmpireS D35002/FZM/27W/80/A50	150x150xH139±1mm	FZM	1530	27W	57	50°
106067 EmpireS D35002/FSM/27W/80/A50	150x150xH139±1mm	FSM	1530	27W	57	50°
106123 EmpireS D35002/FSH/27W/80/A50	150x150xH139±1mm	FSH	2250	27W	84	50°
106228 EmpireS D35000/AMB2200/14W/80/A25	96x96xH91±1mm	AMB2200	915	14W	66	25°
106229 EmpireS D35000/AMB2200/20W/80/A25	96x96xH91±1mm	AMB2200	1270	20W	64	25°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
106230 EmpireS D35000/AMB2200/14W/80/A45	96x96xH91±1mm	AMB2200	915	14W	66	45°
106231 EmpireS D35000/AMB2200/20W/80/A45	96x96xH91±1mm	AMB2200	1270	20W	64	45°
106232 EmpireS D35001/AMB2200/14W/80/A45	128x128xH113x±1mm	AMB2200	1020	14W	73	45°
106233 EmpireS D35001/AMB2200/20W/80/A45	128x128xH113x±1mm	AMB2200	1410	20W	71	45°
106234 EmpireS D35001/AMB2200/27W/80/A45	128x128xH113x±1mm	AMB2200	1870	27W	70	45°
106235 EmpireS D35002/AMB2200/14W/80/A50	150x150xH139±1mm	AMB2200	1020	14W	73	50°
106236 EmpireS D35002/AMB2200/20W/80/A50	150x150xH139±1mm	AMB2200	1410	20W	71	50°
106237 EmpireS D35002/AMB2200/27W/80/A50	150x150xH139±1mm	AMB2200	1870	27W	70	50°
CRI 93						
106400 EmpireS D35000/AGI3000/12W/93/A25	96x96xH91±1mm	AGI3500	735	12W	62	25°
106401 EmpireS D35000/AGI3500/12W/93/A25	96x96xH91±1mm	AGI3500	780	12W	65	25°
106402 EmpireS D35000/AGI4000/12W/93/A25	96x96xH91±1mm	AGI4000	830	12W	70	25°
106403 EmpireS D35000/AGI3000/12W/93/A45	96x96xH91±1mm	AGI3000	735	12W	62	45°
106404 EmpireS D35000/AGI3500/12W/93/A45	96x96xH91±1mm	AGI3500	780	12W	65	45°
106405 EmpireS D35000/AGI4000/12W/93/A45	96x96xH91±1mm	AGI4000	830	12W	70	45°
106406 EmpireS D35000/AGI3000/17W/93/A25	96x96xH91±1mm	AGI3000	985	17W	58	25°
106407 EmpireS D35000/AGI3500/17W/93/A25	96x96xH91±1mm	AGI3500	1050	17W	62	25°
106408 EmpireS D35000/AGI4000/17W/93/A25	96x96xH91±1mm	AGI4000	1115	17W	66	25°
106409 EmpireS D35000/AGI3000/17W/93/A45	96x96xH91±1mm	AGI3000	985	17W	58	45°
106410 EmpireS D35000/AGI3500/17W/93/A45	96x96xH91±1mm	AGI3500	1050	17W	62	45°
106411 EmpireS D35000/AGI4000/17W/93/A45	96x96xH91±1mm	AGI4000	1115	17W	66	45°
106412 EmpireS D35001/AGI3000/12W/93/A45	128x128xH113x±1mm	AGI3000	735	12W	62	45°
106413 EmpireS D35001/AGI3500/12W/93/A45	128x128xH113x±1mm	AGI3500	780	12W	65	45°
106414 EmpireS D35001/AGI4000/12W/93/A45	128x128xH113x±1mm	AGI4000	830	12W	70	45°
106415 EmpireS D35001/AGI3000/17W/93/A45	128x128xH113x±1mm	AGI3000	985	17W	58	45°
106416 EmpireS D35001/AGI3500/17W/93/A45	128x128xH113x±1mm	AGI3500	1050	17W	62	45°
106417 EmpireS D35001/AGI4000/17W/93/A45	128x128xH113x±1mm	AGI4000	1115	17W	66	45°
106418 EmpireS D35001/AGI3000/23W/93/A45	128x128xH113x±1mm	AGI3000	1330	23W	58	45°
106419 EmpireS D35001/AGI3500/23W/93/A45	128x128xH113x±1mm	AGI3500	1440	23W	63	45°
106420 EmpireS D35001/AGI4000/23W/93/A45	128x128xH113x±1mm	AGI4000	1550	23W	68	45°
106421 EmpireS D35002/AGI3000/12W/93/A50	150x150xH139±1mm	AGI3000	735	12W	62	50°
106422 EmpireS D35002/AGI3500/12W/93/A50	150x150xH139±1mm	AGI3500	780	12W	65	50°
106423 EmpireS D35002/AGI4000/12W/93/A50	150x150xH139±1mm	AGI4000	830	12W	70	50°
106424 EmpireS D35002/AGI3000/17W/93/A50	150x150xH139±1mm	AGI3000	985	17W	58	50°
106425 EmpireS D35002/AGI3500/17W/93/A50	150x150xH139±1mm	AGI3500	1050	17W	62	50°
106426 EmpireS D35002/AGI4000/17W/93/A50	150x150xH139±1mm	AGI4000	1115	17W	66	50°
106427 EmpireS D35002/AGI3000/23W/93/A50	150x150xH139±1mm	AGI3000	1330	23W	58	50°
106428 EmpireS D35002/AGI3500/23W/93/A50	150x150xH139±1mm	AGI3500	1440	23W	63	50°
106429 EmpireS D35002/AGI4000/23W/93/A50	150x150xH139±1mm	AGI4000	1550	23W	68	50°
CRI 95						
106056 EmpireS D35001/FAS/27W/95/A45	128x128xH113x±1mm	FAS	2080	27W	78	45°
106059 EmpireS D35002/FAS/27W/95/A50	150x150xH139±1mm	FAS	2080	27W	78	50°
CRI 98						
106125 EmpireS D35001/ART3000/27W/98/A45	128x128xH113x±1mm	ART3000	1995	27W	74	45°
106127 EmpireS D35002/ART3000/27W/98/A50	150x150xH139±1mm	ART3000	1995	27W	74	50°

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