



Empire S

RECESSED DOWNLIGHTS | DALI EM SERIES

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 and AGI.

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

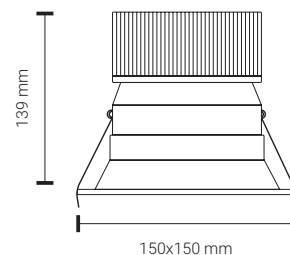
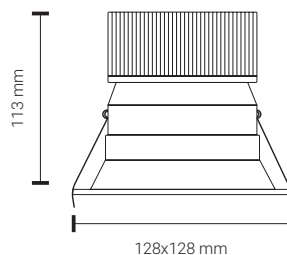
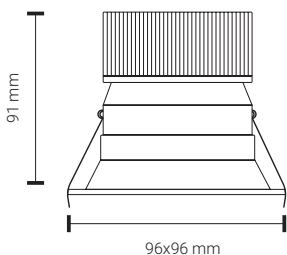
- Empire S Non-DALI – the standard for any project in the retail and health sectors
- Empire S Non-DALI EM – with emergency lighting kit
- Empire S DALI – with DALI controls for dimming
- Empire S DALI EM - with both dimming and emergency kit

APPLICATION

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

FEATURES & BENEFITS

- CRI ≥ 80 as standard, up to 93 for specific special color temperatures
- 7 color temperatures, specialized options included
- Luminaire efficiency: 117lm/W @4000K
- Optics – three angles 25°, 45°, 50°
- IP factor: IP20, IP40 for front face only
- Dimmable
- With emergency kits of 1h and 3 h



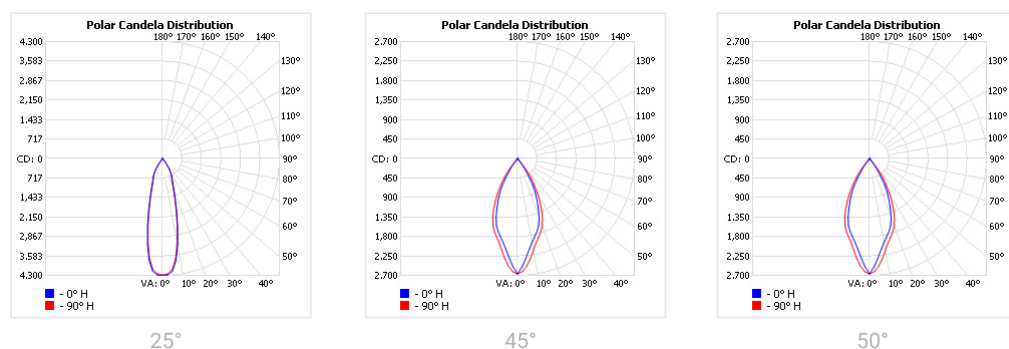
SPECIFICATIONS

Power consumption	12W, 14W, 17W, 20W	12W, 14W, 17W, 20W, 23W, 27W	12W, 14W, 17W, 20W, 23W, 27W
Dimensions	96x96xH91±1mm	128x128xH113x±1mm	150x150xH139±1mm
Weight	1.4 Kg	1.7 Kg	2 Kg
Housing materials	Aluminium, glass		
IK code	IK02		
THD (at 230V, 50Hz, Full load)	<20%		
Protection class	Safety class 1		
Operating temperature [°C]	+5°C ... +40°C / +41F ... +104F		
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	DALI		
Warranty [years]	5		
Storage temperature range [°C]	+5°C ... +25°C / +41F ... +77F		
Emergency option	EM1H, EM3H		

#	Standard	AGI
CRI	CRI80	CRI93
CCT [K]	2700 / 3000 / 3500 / 4000	AGI 3000 / 3500 / 4000
MacAdam	3	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 ≤35W (FZM, FSH)	RG1
FOOD >35W (FZM, FSH)	RG2
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						
206128 EmpireS D35000/2700/14W/80/A25/EM1H	96x96xH91±1mm	2700	1485	14W	107	25°
206129 EmpireS D35000/3000/14W/80/A25/EM1H	96x96xH91±1mm	3000	1500	14W	108	25°
206130 EmpireS D35000/3500/14W/80/A25/EM1H	96x96xH91±1mm	3500	1540	14W	110	25°
206131 EmpireS D35000/4000/14W/80/A25/EM1H	96x96xH91±1mm	4000	1570	14W	113	25°
206133 EmpireS D35000/2700/14W/80/A45/EM1H	96x96xH91±1mm	2700	1485	14W	107	45°
206134 EmpireS D35000/3000/14W/80/A45/EM1H	96x96xH91±1mm	3000	1500	14W	108	45°
206135 EmpireS D35000/3500/14W/80/A45/EM1H	96x96xH91±1mm	3500	1540	14W	110	45°
206136 EmpireS D35000/4000/14W/80/A45/EM1H	96x96xH91±1mm	4000	1570	14W	113	45°
206138 EmpireS D35000/2700/20W/80/A25/EM1H	96x96xH91±1mm	2700	2080	20W	104	25°
206139 EmpireS D35000/3000/20W/80/A25/EM1H	96x96xH91±1mm	3000	2100	20W	105	25°
206140 EmpireS D35000/3500/20W/80/A25/EM1H	96x96xH91±1mm	3500	2160	20W	108	25°
206141 EmpireS D35000/4000/20W/80/A25/EM1H	96x96xH91±1mm	4000	2200	20W	110	25°
206143 EmpireS D35000/2700/20W/80/A45/EM1H	96x96xH91±1mm	2700	2080	20W	104	45°
206144 EmpireS D35000/3000/20W/80/A45/EM1H	96x96xH91±1mm	3000	2100	20W	105	45°
206145 EmpireS D35000/3500/20W/80/A45/EM1H	96x96xH91±1mm	3500	2160	20W	108	45°
206146 EmpireS D35000/4000/20W/80/A45/EM1H	96x96xH91±1mm	4000	2200	20W	110	45°
206148 EmpireS D35001/2700/14W/80/A45/EM1H	128x128xH113x±1mm	2700	1485	14W	107	45°
206149 EmpireS D35001/3000/14W/80/A45/EM1H	128x128xH113x±1mm	3000	1500	14W	108	45°
206150 EmpireS D35001/3500/14W/80/A45/EM1H	128x128xH113x±1mm	3500	1540	14W	110	45°
206151 EmpireS D35001/4000/14W/80/A45/EM1H	128x128xH113x±1mm	4000	1570	14W	113	45°
206153 EmpireS D35001/2700/20W/80/A45/EM1H	128x128xH113x±1mm	2700	2080	20W	104	45°
206154 EmpireS D35001/3000/20W/80/A45/EM1H	128x128xH113x±1mm	3000	2100	20W	105	45°
206155 EmpireS D35001/3500/20W/80/A45/EM1H	128x128xH113x±1mm	3500	2160	20W	108	45°
206156 EmpireS D35001/4000/20W/80/A45/EM1H	128x128xH113x±1mm	4000	2200	20W	110	45°
206158 EmpireS D35001/2700/27W/80/A45/EM1H	128x128xH113x±1mm	2700	2945	27W	110	45°
206159 EmpireS D35001/3000/27W/80/A45/EM1H	128x128xH113x±1mm	3000	2970	27W	110	45°
206160 EmpireS D35001/3500/27W/80/A45/EM1H	128x128xH113x±1mm	3500	3055	27W	114	45°
206161 EmpireS D35001/4000/27W/80/A45/EM1H	128x128xH113x±1mm	4000	3135	27W	117	45°
206163 EmpireS D35002/2700/14W/80/A50/EM1H	150x150xH139±1mm	2700	1485	14W	107	50°
206164 EmpireS D35002/3000/14W/80/A50/EM1H	150x150xH139±1mm	3000	1500	14W	108	50°
206165 EmpireS D35002/3500/14W/80/A50/EM1H	150x150xH139±1mm	3500	1540	14W	110	50°
206166 EmpireS D35002/4000/14W/80/A50/EM1H	150x150xH139±1mm	4000	1570	14W	113	50°
206168 EmpireS D35002/2700/20W/80/A50/EM1H	150x150xH139±1mm	2700	2080	20W	104	50°
206169 EmpireS D35002/3000/20W/80/A50/EM1H	150x150xH139±1mm	3000	2100	20W	105	50°
206170 EmpireS D35002/3500/20W/80/A50/EM1H	150x150xH139±1mm	3500	2160	20W	108	50°
206171 EmpireS D35002/4000/20W/80/A50/EM1H	150x150xH139±1mm	4000	2200	20W	110	50°
206173 EmpireS D35002/2700/27W/80/A50/EM1H	150x150xH139±1mm	2700	2945	27W	110	50°
206174 EmpireS D35002/3000/27W/80/A50/EM1H	150x150xH139±1mm	3000	2970	27W	110	50°
206175 EmpireS D35002/3500/27W/80/A50/EM1H	150x150xH139±1mm	3500	3055	27W	114	50°
206176 EmpireS D35002/4000/27W/80/A50/EM1H	150x150xH139±1mm	4000	3135	27W	117	50°
206178 EmpireS D35000/2700/14W/80/A25/EM3H	96x96xH91±1mm	2700	1485	14W	107	25°
206179 EmpireS D35000/3000/14W/80/A25/EM3H	96x96xH91±1mm	3000	1500	14W	108	25°
206180 EmpireS D35000/3500/14W/80/A25/EM3H	96x96xH91±1mm	3500	1540	14W	110	25°
206181 EmpireS D35000/4000/14W/80/A25/EM3H	96x96xH91±1mm	4000	1570	14W	113	25°
206183 EmpireS D35000/2700/14W/80/A45/EM3H	96x96xH91±1mm	2700	1485	14W	107	45°
206184 EmpireS D35000/3000/14W/80/A45/EM3H	96x96xH91±1mm	3000	1500	14W	108	45°
206185 EmpireS D35000/3500/14W/80/A45/EM3H	96x96xH91±1mm	3500	1540	14W	110	45°
206186 EmpireS D35000/4000/14W/80/A45/EM3H	96x96xH91±1mm	4000	1570	14W	113	45°
206188 EmpireS D35000/2700/20W/80/A25/EM3H	96x96xH91±1mm	2700	2080	20W	104	25°
206189 EmpireS D35000/3000/20W/80/A25/EM3H	96x96xH91±1mm	3000	2100	20W	105	25°
206190 EmpireS D35000/3500/20W/80/A25/EM3H	96x96xH91±1mm	3500	2160	20W	108	25°
206191 EmpireS D35000/4000/20W/80/A25/EM3H	96x96xH91±1mm	4000	2200	20W	110	25°

SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
CRI 80						
206193 EmpireS D35000/2700/20W/80/A45/EM3H	96x96xH91±1mm	2700	2080	20W	104	45°
206194 EmpireS D35000/3000/20W/80/A45/EM3H	96x96xH91±1mm	3000	2100	20W	105	45°
206195 EmpireS D35000/3500/20W/80/A45/EM3H	96x96xH91±1mm	3500	2160	20W	108	45°
206196 EmpireS D35000/4000/20W/80/A45/EM3H	96x96xH91±1mm	4000	2200	20W	110	45°
206198 EmpireS D35001/2700/14W/80/A45/EM3H	128x128xH113x±1mm	2700	1485	14W	107	45°
206199 EmpireS D35001/3000/14W/80/A45/EM3H	128x128xH113x±1mm	3000	1500	14W	108	45°
206200 EmpireS D35001/3500/14W/80/A45/EM3H	128x128xH113x±1mm	3500	1540	14W	110	45°
206201 EmpireS D35001/4000/14W/80/A45/EM3H	128x128xH113x±1mm	4000	1570	14W	113	45°
206203 EmpireS D35001/2700/20W/80/A45/EM3H	128x128xH113x±1mm	2700	2080	20W	104	45°
206204 EmpireS D35001/3000/20W/80/A45/EM3H	128x128xH113x±1mm	3000	2100	20W	105	45°
206205 EmpireS D35001/3500/20W/80/A45/EM3H	128x128xH113x±1mm	3500	2160	20W	108	45°
206206 EmpireS D35001/4000/20W/80/A45/EM3H	128x128xH113x±1mm	4000	2200	20W	110	45°
206208 EmpireS D35001/2700/27W/80/A45/EM3H	128x128xH113x±1mm	2700	2945	27W	110	45°
206209 EmpireS D35001/3000/27W/80/A45/EM3H	128x128xH113x±1mm	3000	2970	27W	110	45°
206210 EmpireS D35001/3500/27W/80/A45/EM3H	128x128xH113x±1mm	3500	3055	27W	114	45°
206211 EmpireS D35001/4000/27W/80/A45/EM3H	128x128xH113x±1mm	4000	3135	27W	117	45°
206213 EmpireS D35002/2700/14W/80/A50/EM3H	150x150xH139±1mm	2700	1485	14W	107	50°
206214 EmpireS D35002/3000/14W/80/A50/EM3H	150x150xH139±1mm	3000	1500	14W	108	50°
206215 EmpireS D35002/3500/14W/80/A50/EM3H	150x150xH139±1mm	3500	1540	14W	110	50°
206216 EmpireS D35002/4000/14W/80/A50/EM3H	150x150xH139±1mm	4000	1570	14W	113	50°
206218 EmpireS D35002/2700/20W/80/A50/EM3H	150x150xH139±1mm	2700	2080	20W	104	50°
206219 EmpireS D35002/3000/20W/80/A50/EM3H	150x150xH139±1mm	3000	2100	20W	105	50°
206220 EmpireS D35002/3500/20W/80/A50/EM3H	150x150xH139±1mm	3500	2160	20W	108	50°
206221 EmpireS D35002/4000/20W/80/A50/EM3H	150x150xH139±1mm	4000	2200	20W	110	50°
206223 EmpireS D35002/2700/27W/80/A50/EM3H	150x150xH139±1mm	2700	2945	27W	110	50°
206224 EmpireS D35002/3000/27W/80/A50/EM3H	150x150xH139±1mm	3000	2970	27W	110	50°
206225 EmpireS D35002/3500/27W/80/A50/EM3H	150x150xH139±1mm	3500	3055	27W	114	50°
206226 EmpireS D35002/4000/27W/80/A50/EM3H	150x150xH139±1mm	4000	3135	27W	117	50°
CRI 93						
206430 EmpireS D35000/AGI3000/12W/93/A25/EM1H	96x96xH91±1mm	AGI3500	735	12W	62	25°
206431 EmpireS D35000/AGI3500/12W/93/A25/EM1H	96x96xH91±1mm	AGI3500	780	12W	65	25°
206432 EmpireS D35000/AGI4000/12W/93/A25/EM1H	96x96xH91±1mm	AGI4000	830	12W	70	25°
206433 EmpireS D35000/AGI3000/12W/93/A45/EM1H	96x96xH91±1mm	AGI3000	735	12W	62	45°
206434 EmpireS D35000/AGI3500/12W/93/A45/EM1H	96x96xH91±1mm	AGI3500	780	12W	65	45°
206435 EmpireS D35000/AGI4000/12W/93/A45/EM1H	96x96xH91±1mm	AGI4000	830	12W	70	45°
206436 EmpireS D35000/AGI3000/17W/93/A25/EM1H	96x96xH91±1mm	AGI3000	985	17W	58	25°
206437 EmpireS D35000/AGI3500/17W/93/A25/EM1H	96x96xH91±1mm	AGI3500	1050	17W	62	25°
206438 EmpireS D35000/AGI4000/17W/93/A25/EM1H	96x96xH91±1mm	AGI4000	1115	17W	66	25°
206439 EmpireS D35000/AGI3000/17W/93/A45/EM1H	96x96xH91±1mm	AGI3000	985	17W	58	45°
206440 EmpireS D35000/AGI3500/17W/93/A45/EM1H	96x96xH91±1mm	AGI3500	1050	17W	62	45°
206441 EmpireS D35000/AGI4000/17W/93/A45/EM1H	96x96xH91±1mm	AGI4000	1115	17W	66	45°
206442 EmpireS D35001/AGI3000/12W/93/A45/EM1H	128x128xH113x±1mm	AGI3000	735	12W	62	45°
206443 EmpireS D35001/AGI3500/12W/93/A45/EM1H	128x128xH113x±1mm	AGI3500	780	12W	65	45°
206444 EmpireS D35001/AGI4000/12W/93/A45/EM1H	128x128xH113x±1mm	AGI4000	830	12W	70	45°
206445 EmpireS D35001/AGI3000/17W/93/A45/EM1H	128x128xH113x±1mm	AGI3000	985	17W	58	45°
206446 EmpireS D35001/AGI3500/17W/93/A45/EM1H	128x128xH113x±1mm	AGI3500	1050	17W	62	45°
206447 EmpireS D35001/AGI4000/17W/93/A45/EM1H	128x128xH113x±1mm	AGI4000	1115	17W	66	45°
206448 EmpireS D35001/AGI3000/23W/93/A45/EM1H	128x128xH113x±1mm	AGI3000	1330	23W	58	45°
206449 EmpireS D35001/AGI3500/23W/93/A45/EM1H	128x128xH113x±1mm	AGI3500	1440	23W	63	45°
206450 EmpireS D35001/AGI4000/23W/93/A45/EM1H	128x128xH113x±1mm	AGI4000	1550	23W	68	45°
206451 EmpireS D35002/AGI3000/12W/93/A50/EM1H	150x150xH139±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						
206452 EmpireS D35002/AGI3500/12W/93/A50/EM1H	150x150xH139±1mm	AGI3500	780	12W	65	50°
206453 EmpireS D35002/AGI4000/12W/93/A50/EM1H	150x150xH139±1mm	AGI4000	830	12W	70	50°
206454 EmpireS D35002/AGI3000/17W/93/A50/EM1H	150x150xH139±1mm	AGI3000	985	17W	58	50°
206455 EmpireS D35002/AGI3500/17W/93/A50/EM1H	150x150xH139±1mm	AGI3500	1050	17W	62	50°
206456 EmpireS D35002/AGI4000/17W/93/A50/EM1H	150x150xH139±1mm	AGI4000	1115	17W	66	50°
206457 EmpireS D35002/AGI3000/23W/93/A50/EM1H	150x150xH139±1mm	AGI3000	1330	23W	58	50°
206458 EmpireS D35002/AGI3500/23W/93/A50/EM1H	150x150xH139±1mm	AGI3500	1440	23W	63	50°
206459 EmpireS D35002/AGI4000/23W/93/A50/EM1H	150x150xH139±1mm	AGI4000	1550	23W	68	50°
206460 EmpireS D35000/AGI3000/12W/93/A25/EM3H	96x96xH91±1mm	AGI3500	735	12W	62	25°
206461 EmpireS D35000/AGI3500/12W/93/A25/EM3H	96x96xH91±1mm	AGI3500	780	12W	65	25°
206462 EmpireS D35000/AGI4000/12W/93/A25/EM3H	96x96xH91±1mm	AGI4000	830	12W	70	25°
206463 EmpireS D35000/AGI3000/12W/93/A45/EM3H	96x96xH91±1mm	AGI3000	735	12W	62	45°
206464 EmpireS D35000/AGI3500/12W/93/A45/EM3H	96x96xH91±1mm	AGI3500	780	12W	65	45°
206465 EmpireS D35000/AGI4000/12W/93/A45/EM3H	96x96xH91±1mm	AGI4000	830	12W	70	45°
206466 EmpireS D35000/AGI3000/17W/93/A25/EM3H	96x96xH91±1mm	AGI3000	985	17W	58	25°
206467 EmpireS D35000/AGI3500/17W/93/A25/EM3H	96x96xH91±1mm	AGI3500	1050	17W	62	25°
206468 EmpireS D35000/AGI4000/17W/93/A25/EM3H	96x96xH91±1mm	AGI4000	1115	17W	66	25°
206469 EmpireS D35000/AGI3000/17W/93/A45/EM3H	96x96xH91±1mm	AGI3000	985	17W	58	45°
206470 EmpireS D35000/AGI3500/17W/93/A45/EM3H	96x96xH91±1mm	AGI3500	1050	17W	62	45°
206471 EmpireS D35000/AGI4000/17W/93/A45/EM3H	96x96xH91±1mm	AGI4000	1115	17W	66	45°
206472 EmpireS D35001/AGI3000/12W/93/A45/EM3H	128x128xH113x±1mm	AGI3000	735	12W	62	45°
206473 EmpireS D35001/AGI3500/12W/93/A45/EM3H	128x128xH113x±1mm	AGI3500	780	12W	65	45°
206474 EmpireS D35001/AGI4000/12W/93/A45/EM3H	128x128xH113x±1mm	AGI4000	830	12W	70	45°
206475 EmpireS D35001/AGI3000/17W/93/A45/EM3H	128x128xH113x±1mm	AGI3000	985	17W	58	45°
206476 EmpireS D35001/AGI3500/17W/93/A45/EM3H	128x128xH113x±1mm	AGI3500	1050	17W	62	45°
206477 EmpireS D35001/AGI4000/17W/93/A45/EM3H	128x128xH113x±1mm	AGI4000	1115	17W	66	45°
206478 EmpireS D35001/AGI3000/23W/93/A45/EM3H	128x128xH113x±1mm	AGI3000	1330	23W	58	45°
206479 EmpireS D35001/AGI3500/23W/93/A45/EM3H	128x128xH113x±1mm	AGI3500	1440	23W	63	45°
206480 EmpireS D35001/AGI4000/23W/93/A45/EM3H	128x128xH113x±1mm	AGI4000	1550	23W	68	45°
206481 EmpireS D35002/AGI3000/12W/93/A50/EM3H	150x150xH139±1mm	AGI3000	735	12W	62	50°
206482 EmpireS D35002/AGI3500/12W/93/A50/EM3H	150x150xH139±1mm	AGI3500	780	12W	65	50°
206483 EmpireS D35002/AGI4000/12W/93/A50/EM3H	150x150xH139±1mm	AGI4000	830	12W	70	50°
206484 EmpireS D35002/AGI3000/17W/93/A50/EM3H	150x150xH139±1mm	AGI3000	985	17W	58	50°
206485 EmpireS D35002/AGI3500/17W/93/A50/EM3H	150x150xH139±1mm	AGI3500	1050	17W	62	50°
206486 EmpireS D35002/AGI4000/17W/93/A50/EM3H	150x150xH139±1mm	AGI4000	1115	17W	66	50°
206487 EmpireS D35002/AGI3000/23W/93/A50/EM3H	150x150xH139±1mm	AGI3000	1330	23W	58	50°
206488 EmpireS D35002/AGI3500/23W/93/A50/EM3H	150x150xH139±1mm	AGI3500	1440	23W	63	50°
206489 EmpireS D35002/AGI4000/23W/93/A50/EM3H	150x150xH139±1mm	AGI4000	1550	23W	68	50°

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: November 18, 2019 12:48 PM. www.greentek.eu