



## Sage

### RECESSED DIRECTIONAL SPOTLIGHTS | ECO-DALI

Our adjustable spotlight that creates brilliant accent lighting. Housing comes in two colors - jet black and signal white, for a perfect blending with different environments. Narrow-angle beams (15°, 24°, 36°) allow for very precise light direction. Can be equipped with FAS and AGI special colors for bright colored goods in fashion retail and food retail sectors.

Sage has particular technical specifications, determined by various add-on and controls:

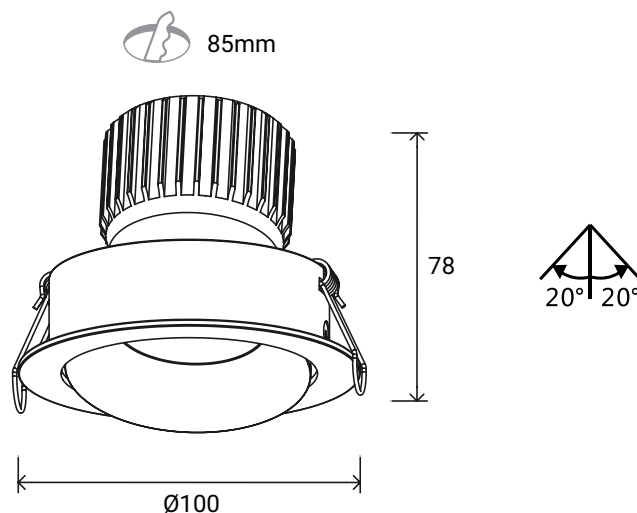
- Sage TEC – the standard for retail spaces
- Sage ECO-DALI – with DALI controls for illumination adjustments

### APPLICATION

Grocery & supermarket | Retail | DIY

### FEATURES & BENEFITS

- CRI 80 as standard, 93 and 95 available
- 8 color temperatures: 2700K, 3000K, 3500K, 4000K, FAS, AGI3000, AGI3500, AGI4000
- Long rated life: L90/B10@50.000h
- Luminaire efficiency: 94 lm/W @4000K
- Dimmable



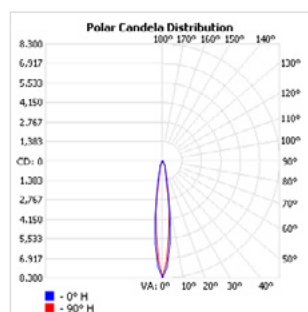
**SPECIFICATIONS**

Power consumption	6W, 8W, 10W, 12W
Dimensions	Ø100x78mm±1mm
Weight	0.4 Kg
Housing materials	Aluminium, polycarbonate
IK code	IK02
THD (at 230V, 50Hz, Full load)	<8%
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°, 24°, 36°
Lifespan [h]	50,000
Housing color	○ RAL 9003 - Signal White, ● RAL 9005 - Jet Black
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 °C / -4F ... +131F
Emergency option	-

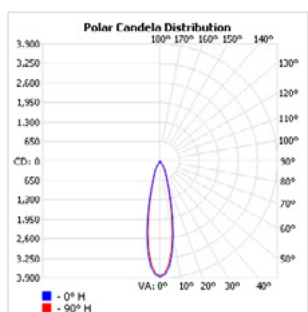
#	Standard	Food	Fashion	AGI	Enhanced	ART	AMB	SUNSET
CRI	CRI80	CRI80	CRI95	CRI93	CRI90 / CRI95	CRI98	CRI80	CRI90
CCT [K]	2700 / 3000 / 3500 / 4000	BVF / FBS / FZM / FSM / FSH	FAS	AGI 3000 / 3500 / 4000	2700 / 3000 / 3500 / 4000	3000	2200	1800...2700
MacAdam	3	3 / 4 / 4 / 3 / 3	3	3	2	2	3	3

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

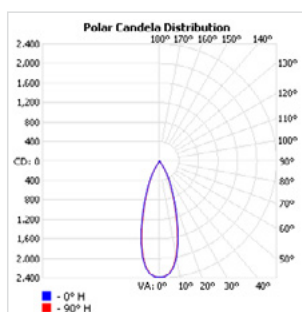
**LIGHT DISTRIBUTION**



15°



24°



36°

**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)**      RG2 (dthr=0.8m)

**FAS**                      RG2 (dthr=0.8m)

**AMB2200**                RG1

**AGI**                        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 (°)
<b>CRI 80</b>						
282000 Sage D33011/3000/8W/80/A15	Ø100x78±1mm	3000	715	8W	90	15°
282001 Sage D33011/4000/8W/80/A15	Ø100x78±1mm	4000	750	8W	94	15°
282002 Sage D33011/3000/8W/80/A24	Ø100x78±1mm	3000	715	8W	90	24°
282003 Sage D33011/4000/8W/80/A24	Ø100x78±1mm	4000	750	8W	94	24°
282004 Sage D33011/3000/8W/80/A36	Ø100x78±1mm	3000	715	8W	90	36°
282005 Sage D33011/4000/8W/80/A36	Ø100x78±1mm	4000	750	8W	94	36°
282006 Sage D33011/3000/10W/80/A15	Ø100x78±1mm	3000	890	10W	89	15°
282007 Sage D33011/4000/10W/80/A15	Ø100x78±1mm	4000	930	10W	93	15°
282008 Sage D33011/3000/10W/80/A24	Ø100x78±1mm	3000	890	10W	89	24°
282009 Sage D33011/4000/10W/80/A24	Ø100x78±1mm	4000	930	10W	93	24°
282010 Sage D33011/3000/10W/80/A36	Ø100x78±1mm	3000	890	10W	89	36°
282011 Sage D33011/4000/10W/80/A36	Ø100x78±1mm	4000	930	10W	93	36°
282012 Sage D33011/3000/12W/80/A15	Ø100x78±1mm	3000	1000	12W	84	15°
282013 Sage D33011/4000/12W/80/A15	Ø100x78±1mm	4000	1045	12W	88	15°
282014 Sage D33011/3000/12W/80/A24	Ø100x78±1mm	3000	1000	12W	84	24°
282015 Sage D33011/4000/12W/80/A24	Ø100x78±1mm	4000	1045	12W	88	24°
282016 Sage D33011/3000/12W/80/A36	Ø100x78±1mm	3000	1000	12W	84	36°
282017 Sage D33011/4000/12W/80/A36	Ø100x78±1mm	4000	1045	12W	88	36°
282054 Sage D33011/AMB2200/8W/80/A15	Ø100x78±1mm	AMB2200	575	8W	72	15°
282055 Sage D33011/AMB2200/8W/80/A24	Ø100x78±1mm	AMB2200	575	8W	72	24°
282056 Sage D33011/AMB2200/8W/80/A36	Ø100x78±1mm	AMB2200	575	8W	72	36°
282057 Sage D33011/AMB2200/10W/80/A15	Ø100x78±1mm	AMB2200	735	10W	74	15°
282058 Sage D33011/AMB2200/10W/80/A24	Ø100x78±1mm	AMB2200	735	10W	74	24°
282059 Sage D33011/AMB2200/10W/80/A36	Ø100x78±1mm	AMB2200	735	10W	74	36°
282060 Sage D33011/AMB2200/12W/80/A15	Ø100x78±1mm	AMB2200	835	12W	70	15°
282061 Sage D33011/AMB2200/12W/80/A24	Ø100x78±1mm	AMB2200	835	12W	70	24°
282062 Sage D33011/AMB2200/12W/80/A36	Ø100x78±1mm	AMB2200	835	12W	70	36°
<b>CRI 93</b>						
282027 Sage D33011/AGI3000/6W/93/A15	Ø100x78±1mm	AGI3000	390	6W	65	15°
282028 Sage D33011/AGI3500/6W/93/A15	Ø100x78±1mm	AGI3500	415	6W	70	15°
282029 Sage D33011/AGI4000/6W/93/A15	Ø100x78±1mm	AGI4000	440	6W	74	15°
282030 Sage D33011/AGI3000/6W/93/A24	Ø100x78±1mm	AGI3000	390	6W	65	24°
282031 Sage D33011/AGI3500/6W/93/A24	Ø100x78±1mm	AGI3500	415	6W	70	24°
282032 Sage D33011/AGI4000/6W/93/A24	Ø100x78±1mm	AGI4000	440	6W	74	24°
282033 Sage D33011/AGI3000/6W/93/A36	Ø100x78±1mm	AGI3000	390	6W	65	36°
282034 Sage D33011/AGI3500/6W/93/A36	Ø100x78±1mm	AGI3500	415	6W	70	36°
282035 Sage D33011/AGI4000/6W/93/A36	Ø100x78±1mm	AGI4000	440	6W	74	36°
282036 Sage D33011/AGI3000/8W/93/A15	Ø100x78±1mm	AGI3000	495	8W	62	15°
282037 Sage D33011/AGI3500/8W/93/A15	Ø100x78±1mm	AGI3500	530	8W	67	15°
282038 Sage D33011/AGI4000/8W/93/A15	Ø100x78±1mm	AGI4000	565	8W	71	15°
282039 Sage D33011/AGI3000/8W/93/A24	Ø100x78±1mm	AGI3000	495	8W	62	24°
282040 Sage D33011/AGI3500/8W/93/A24	Ø100x78±1mm	AGI3500	530	8W	67	24°
282041 Sage D33011/AGI4000/8W/93/A24	Ø100x78±1mm	AGI4000	565	8W	71	24°
282042 Sage D33011/AGI3000/8W/93/A36	Ø100x78±1mm	AGI3000	495	8W	62	36°
282043 Sage D33011/AGI3500/8W/93/A36	Ø100x78±1mm	AGI3500	530	8W	67	36°
282044 Sage D33011/AGI4000/8W/93/A36	Ø100x78±1mm	AGI4000	565	8W	71	36°
282045 Sage D33011/AGI3000/10W/93/A15	Ø100x78±1mm	AGI3000	570	10W	57	15°
282046 Sage D33011/AGI3500/10W/93/A15	Ø100x78±1mm	AGI3500	610	10W	61	15°
282047 Sage D33011/AGI4000/10W/93/A15	Ø100x78±1mm	AGI4000	650	10W	65	15°
282048 Sage D33011/AGI3000/10W/93/A24	Ø100x78±1mm	AGI3000	570	10W	57	24°
282049 Sage D33011/AGI3500/10W/93/A24	Ø100x78±1mm	AGI3500	610	10W	61	24°

## SKU SPECIFICATIONS

Product Code	Dimensions (mm)	CCT (K)	Lumens (lm)	Power (W)	Eff. (lm/watt)	Lens Angle (°)
<b>CRI 93</b>						
282050 Sage D33011/AGI4000/10W/93/A24	Ø100x78±1mm	AGI4000	650	10W	65	24°
282051 Sage D33011/AGI3000/10W/93/A36	Ø100x78±1mm	AGI3000	570	10W	57	36°
282052 Sage D33011/AGI3500/10W/93/A36	Ø100x78±1mm	AGI3500	610	10W	61	36°
282053 Sage D33011/AGI4000/10W/93/A36	Ø100x78±1mm	AGI4000	650	10W	65	36°
<b>CRI 95</b>						
282018 Sage D33011/FAS/8W/95/A15	Ø100x78±1mm	FAS	530	8W	67	15°
282019 Sage D33011/FAS/8W/95/A24	Ø100x78±1mm	FAS	530	8W	67	24°
282020 Sage D33011/FAS/8W/95/A36	Ø100x78±1mm	FAS	530	8W	67	36°
282021 Sage D33011/FAS/10W/95/A15	Ø100x78±1mm	FAS	665	10W	67	15°
282022 Sage D33011/FAS/10W/95/A24	Ø100x78±1mm	FAS	665	10W	67	24°
282023 Sage D33011/FAS/10W/95/A36	Ø100x78±1mm	FAS	665	10W	67	36°
282024 Sage D33011/FAS/12W/95/A15	Ø100x78±1mm	FAS	755	12W	63	15°
282025 Sage D33011/FAS/12W/95/A24	Ø100x78±1mm	FAS	755	12W	63	24°
282026 Sage D33011/FAS/12W/95/A36	Ø100x78±1mm	FAS	755	12W	63	36°