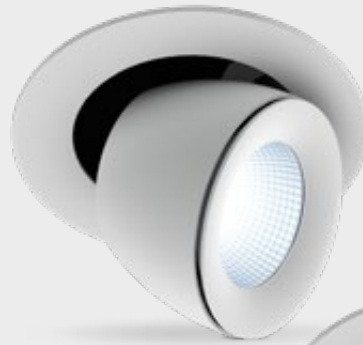
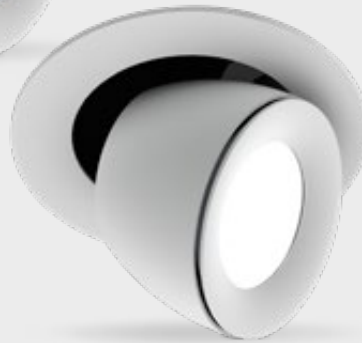


**FEATURES**

- 4 different sharp beam angles
- Wide variety of TM30 optimized LEDs
- ENEC approved drivers
- IEEE P1789 Flickerfree driver to 1%



LV 18° / 37° / 60°



LV 80° (on request)

**COLOURS**

Available colours:



Matt white RAL 9016 (XX=MW)  
Matt black RAL 9005 (XX=BL)

**SPRINGS**

Standard with CS springs (concrete/gyproc).  
Also available with GS springs (gyproc).

# Linea DS-A 195 LV(-HE)

Adjustable

## SPECIFICATIONS

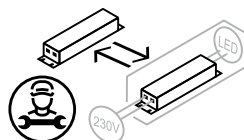
Beam angle (FWHM)	18° / 37° / 60° (80° on request)
Fixture material	Die cast aluminium / Glass
Environment	Indoor
IP rate	IP20
IK rate	IK09
Operating temperature (Ta)	-20°C / +45°C <sup>1</sup>
Safety marks	EN60598 / EN62031 / EN62471
EMC compliance	EN55015
Colour consistency (SDCM)	MacAdam step 3
Warranty	7 Years
Energy class	These products contains a light source of energy efficiency class: <b>CRI97 - F (3000K) &amp; CRI82 - E (3000K) / D (4000K)</b>

This luminaire contains built-in LED lamps. The lamps cannot be changed in the luminaire. EU 874/2012

<sup>1</sup> In applications with a flat roof (fi. car showrooms) the temperatures may exceed 45°C. Please ask our sales office for a special driver.



Ask our sales department about the possibilities for:  
- Tunable white 2700-6500K.  
- High CRI LED options



**LINEA DS-A 195 LV(-HE) VARIATIONS**

Linea DS-A 195 LV-HE	CRI82	3000/4000K	3575/3650Lm	incl. power supply	page 3
Linea DS-A 195 LV-HE	CRI82	3000/4000K	5550/5800Lm	incl. power supply	page 4
Linea DS-A 195 LV	CRI97	3000K	2500Lm	incl. power supply	page 5
Linea DS-A 195 LV	CRI97	3000K	3250/3750Lm	incl. power supply	page 6

**CRI82 CHOOSE YOUR LV LUMEN OUTPUT**

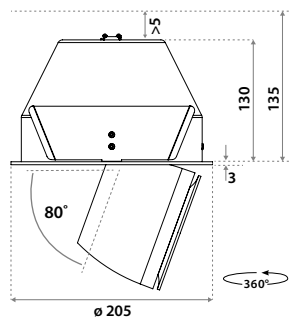
	mA	W	Lumen Output		Lumen / Watt		UGR			Driver types				
			3000K	4000K	3000K	4000K	3000K			No dim	Triac	1-10V&Push	Dali	Casambi
							18°	37°	60°					
<i>Special request</i>	250	9.2	1350	1400	147	152				CC21W150-500	<b>x</b>	126421	127576	<b>x</b>
<i>Special request</i>	350	13.1	1850	1900	141	145				CC21W150-500	<b>x</b>	127021	127576	127630
<i>Special request</i>	500	19.4	2525	2600	130	134				CC21W150-500	127032	127021	127576	127630
<b>Standard</b>	700	27.9	3575	3650	128	131	18.6	18.1	21.1	CC30W350-700	122260	127021	127576	127630
<i>Special request</i>	800	32.4	3825	4050	118	125				127484	on request	127021	127490	127630
<i>Special request</i>	900	36.8	4300	4500	117	122				127484	on request	127021	127490	127630
<i>Special request</i>	1050	43.7	4900	5100	112	117				127484	on request	127021	127490	127630
<b>Standard</b>	1200	51.2	5550	5800	108	113	20.1	19.6	22.6	127690	on request	123170	123170	On request

**CRI97 CHOOSE YOUR LV LUMEN OUTPUT**

	mA	W	Lumen Output		Lumen / Watt		UGR			Driver types				
			3000K	3000K	3000K	3000K	3000K			No dim	Triac	1-10V&Push	Dali	Casambi
							18°	37°	60°					
<i>Special request</i>	250	9.4	800		85					CC21W150-500	<b>x</b>	126421	127576	<b>x</b>
<i>Special request</i>	350	13.2	1100		83					CC21W150-500	<b>x</b>	127021	127576	127630
<i>Special request</i>	500	17.9	1450		81					CC21W150-500	127032	127021	127576	127630
<i>Special request</i>	700	27.0	2150		80					CC30W350-700	122260	127021	127576	127630
<b>Standard</b>	800	32.1	2500		78		17.3	16.8	19.8	127484	on request	127021	127490	127630
<i>Special request</i>	900	35.5	2700		76					127484	on request	127021	127490	127630
<i>Special request</i>	1050	41.7	3000		72					127484	on request	127021	127490	127630
<b>Standard</b>	1200	50.5	3250 <sup>1</sup>		64		18.2	17.7	20.7	127690	on request	123170	123170	On request
<i>Special request</i>	1400	57.2	3750 <sup>2</sup>		66		18.7	18.2	21.2	<b>x</b>	on request	123170	123170	On request

<sup>1</sup> For large downlights CRI97 No dim. <sup>2</sup> For large downlights CR97 1-10V and Dali.

**DIMENSIONS**



**HOLE SIZE**



**Using CS springs:** Ø 195 mm.  
Thickness ceiling 5-135 mm & recess depth 135 mm. For plasterboard ceilings or similar harder materials. Turn the ring on the front counterclockwise after installation.



**Using GS springs:** Ø 195 mm.  
Thickness ceiling 1-135 mm & recess depth 135 mm. For soft ceiling tiles we recommend using a wooden plate or a ceiling ring on the reverse side of the tile.

**LINEA DS-A 195 LV-HE**

**CRI82 3575/3650LM**

**ITEM SPECIFICATIONS (PART A)**

Description	Item code		UGR	Type	mA	Vf
	CS	GS				
Linea DS-A LV-HE 3575 Lm 3000K CRI82 18° No dim	13N603XXCA02	13N603XXGA02	18.6	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 18° 1-10V & Push	13N603XXNA02	13N603XXUA02	18.6	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 18° Dali	13N603XXPA02	13N603XXVA02	18.6	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 37° No dim	13N603XXCB02	13N603XXGB02	18.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 37° 1-10V & Push	13N603XXNB02	13N603XXUB02	18.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 37° Dali	13N603XXPB02	13N603XXVB02	18.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 60° No dim	13N603XXCC02	13N603XXGC02	21.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 60° 1-10V & Push	13N603XXNC02	13N603XXUC02	21.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3575 Lm 3000K CRI82 60° Dali	13N603XXPC02	13N603XXVC02	21.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 18° No dim	13N603XXCD02	13N603XXGD02	18.6	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 18° 1-10V & Push	13N603XXND02	13N603XXUD02	18.6	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 18° Dali	13N603XXPD02	13N603XXVD02	18.6	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 37° No dim	13N603XXCE02	13N603XXGE02	18.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 37° 1-10V & Push	13N603XXNE02	13N603XXUE02	18.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 37° Dali	13N603XXPE02	13N603XXVE02	18.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 60° No dim	13N603XXCF02	13N603XXGF02	21.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 60° 1-10V & Push	13N603XXNF02	13N603XXUF02	21.1	Incl. PSU	700	37,5
Linea DS-A LV-HE 3650 Lm 4000K CRI82 60° Dali	13N603XXPF02	13N603XXVF02	21.1	Incl. PSU	700	37,5

**ITEM SPECIFICATIONS (PART B)**

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-A LV-HE 3575 Lm 3000K CRI82 No dim	27,9	3575	128	82	0.95	<3%	5A 50µS	50 pcs	II	E
Linea DS-A LV-HE 3575 Lm 3000K CRI82 1-10V & Push	27,9	3575	128	82	0.95	<3%	5A 50µS	50 pcs	II	E
Linea DS-A LV-HE 3575 Lm 3000K CRI82 Dali	27,9	3575	128	82	0.95	<3%	5A 50µS	50 pcs	II	E
Linea DS-A LV-HE 3650 Lm 4000K CRI82 No dim	27,9	3650	131	82	0.95	<3%	5A 50µS	50 pcs	II	D
Linea DS-A LV-HE 3650 Lm 4000K CRI82 1-10V & Push	27,9	3650	131	82	0.95	<3%	5A 50µS	50 pcs	II	D
Linea DS-A LV-HE 3650 Lm 4000K CRI82 Dali	27,9	3650	131	82	0.95	<3%	5A 50µS	50 pcs	II	D

**ITEM SPECIFICATIONS (PART C)**

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan B10 reported (25°C)		
				L70B10	L80B10	L90B10
Linea DS-A LV-HE CRI82	2094 gr	210x210x140 mm	6 pcs	>60.500 hrs	>60.500 hrs	>60.500 hrs

All values are measured at 230V (+/- 7%)

**LINEA DS-A 195 LV-HE**

**CRI82 5550/5800LM**

**ITEM SPECIFICATIONS (PART A)**

Description	Item code		UGR	Type	mA	Vf
	CS	GS				
Linea DS-A LV-HE 5550 Lm 3000K CRI82 18° No dim	13N603XXCR02	13N603XXGR02	20.1	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 18° 1-10V & Push	13N603XXNK02	13N603XXUK02	20.1	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 18° Dali	13N603XXPK02	13N603XXVK02	20.1	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 37° No dim	13N603XXCS02	13N603XXGS02	19.6	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 37° 1-10V & Push	13N603XXNL02	13N603XXUL02	19.6	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 37° Dali	13N603XXPL02	13N603XXVL02	19.6	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 60° No dim	13N603XXCT02	13N603XXGT02	22.6	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 60° 1-10V & Push	13N603XXNM02	13N603XXUM02	22.6	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5550 Lm 3000K CRI82 60° Dali	13N603XXPM02	13N603XXVM02	22.6	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 18° No dim	13N603XXCU02	13N603XXGU02	20.2	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 18° 1-10V & Push	13N603XXNN02	13N603XXUN02	20.2	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 18° Dali	13N603XXPN02	13N603XXVN02	20.2	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 37° No dim	13N603XXCV02	13N603XXGV02	19.7	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 37° 1-10V & Push	13N603XXNP02	13N603XXUP02	19.7	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 37° Dali	13N603XXPP02	13N603XXVP02	19.7	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 60° No dim	13N603XXCW02	13N603XXGW02	22.8	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 60° 1-10V & Push	13N603XXNQ02	13N603XXUQ02	22.8	Incl. PSU	1200	37,5
Linea DS-A LV-HE 5800 Lm 4000K CRI82 60° Dali	13N603XXPQ02	13N603XXVQ02	22.8	Incl. PSU	1200	37,5

**ITEM SPECIFICATIONS (PART B)**

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-A LV-HE 5550 Lm 3000K CRI82 No dim	51,2	5550	108	82	0.95	<3%	10A 200µs	30 pcs	II	E
Linea DS-A LV-HE 5550 Lm 3000K CRI82 1-10V & Push	51,2	5550	108	82	0.95	<3%	10A 200µs	30 pcs	I	E
Linea DS-A LV-HE 5550 Lm 3000K CRI82 Dali	51,2	5550	108	82	0.95	<3%	10A 200µs	30 pcs	I	E
Linea DS-A LV-HE 5800 Lm 4000K CRI82 No dim	51,2	5800	113	82	0.95	<3%	10A 200µs	30 pcs	II	D
Linea DS-A LV-HE 5800 Lm 4000K CRI82 1-10V & Push	51,2	5800	113	82	0.95	<3%	10A 200µs	30 pcs	I	D
Linea DS-A LV-HE 5800 Lm 4000K CRI82 Dali	51,2	5800	113	82	0.95	<3%	10A 200µs	30 pcs	I	D

**ITEM SPECIFICATIONS (PART C)**

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan B10 reported (25°C)		
				L70B10	L80B10	L90B10
Linea DS-A LV-HE CRI82	2094 gr	210x210x140 mm	6 pcs	>60.500 hrs	>60.500 hrs	>60.500 hrs

All values are measured at 230V (+/- 7%)

**LINEA DS-A 195 LV**

**CRI97 2500LM**

**ITEM SPECIFICATIONS (PART A)**

Description	Item code		UGR	Type	mA	Vf
	CS	GS				
Linea DS-A LV 2500 Lm 3000K CRI82 18° No dim	130603XXCG02	130603XXGG02	17.3	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 18° 1-10V & Push	130603XXNG02	130603XXUG02	17.3	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 18° Dali	130603XXPG02	130603XXVG02	17.3	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 37° No dim	130603XXCH02	130603XXGH02	16.8	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 37° 1-10V & Push	130603XXNH02	130603XXUH02	16.8	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 37° Dali	130603XXPH02	130603XXVH02	16.8	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 60° No dim	130603XXCJ02	130603XXGJ02	19.8	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 60° 1-10V & Push	130603XXNJ02	130603XXUJ02	19.8	Incl. PSU	800	37,5
Linea DS-A LV 2500 Lm 3000K CRI82 60° Dali	130603XXPJ02	130603XXPJ02	19.8	Incl. PSU	800	37,5

**ITEM SPECIFICATIONS (PART B)**

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-A LV 2500 Lm 3000K CRI97 No dim	32,1	2500	78	97	0.95	<3%	5A 50µS	50 pcs	I	F
Linea DS-A LV 2500 Lm 3000K CRI97 1-10V & Push	32,1	2500	78	97	0.95	<3%	5A 50µS	50 pcs	II	F
Linea DS-A LV 2500 Lm 3000K CRI97 Dali	32,1	2500	78	97	0.95	<3%	5A 50µS	50 pcs	II	F

**ITEM SPECIFICATIONS (PART C)**

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan B10 reported (25°C)		
				L70B10	L80B10	L90B10
Linea DS-A LV 2500 Lm 3000K CRI97	2094 gr	210x210x140 mm	6 pcs	>60.500 hrs	>60.500 hrs	>60.500 hrs

All values are measured at 230V (+/- 7%)

**LINEA DS-A 195 LV**

**CRI97 3750LM**

**ITEM SPECIFICATIONS (PART A)**

Description	Item code		UGR	Type	mA	Vf
	CS	GS				
Linea DS-A LV 3250 Lm 3000K CRI82 18° No dim	130603XXFD02	130603XXFK02	18.2	Incl. PSU	1200	37,5
Linea DS-A LV 3750 Lm 3000K CRI82 18° 1-10V & Push	130603XXNR02	130603XXUR02	18.7	Incl. PSU	1400	37,5
Linea DS-A LV 3750 Lm 3000K CRI82 18° Dali	130603XXPR02	130603XXVR02	18.7	Incl. PSU	1400	37,5
Linea DS-A LV 3250 Lm 3000K CRI82 37° No dim	130603XXFE02	130603XXFL02	17.7	Incl. PSU	1200	37,5
Linea DS-A LV 3750 Lm 3000K CRI82 37° 1-10V & Push	130603XXNS02	130603XXUS02	18.2	Incl. PSU	1400	37,5
Linea DS-A LV 3750 Lm 3000K CRI82 37° Dali	130603XXPS02	130603XXVS02	18.2	Incl. PSU	1400	37,5
Linea DS-A LV 3250 Lm 3000K CRI82 60° No dim	130603XXFF02	130603XXFM02	20.7	Incl. PSU	1200	37,5
Linea DS-A LV 3750 Lm 3000K CRI82 60° 1-10V & Push	130603XXNT02	130603XXUT02	21.2	Incl. PSU	1400	37,5
Linea DS-A LV 3750 Lm 3000K CRI82 60° Dali	130603XXPT02	130603XXVT02	21.2	Incl. PSU	1400	37,5

**ITEM SPECIFICATIONS (PART B)**

Description	W	Lm	Lm/W	CRI (typ.)	Pf	Ripple	Inrush current	B-16A Fuse	Safety class	Energy class
Linea DS-A LV 3250 Lm 3000K CRI97 No dim	50,5	3250	64	97	0.95	<3%	10A 200µS	30 pcs	II	F
Linea DS-A LV 3750 Lm 3000K CRI97 1-10V & Push	57,2	3750	66	97	0.95	<3%	10A 200µS	30 pcs	I	F
Linea DS-A LV 3750 Lm 3000K CRI97 Dali	57,2	3750	66	97	0.95	<3%	10A 200µS	30 pcs	I	F

**ITEM SPECIFICATIONS (PART C)**

Description	Weight	Dimensions single carton	Quantity per carton	Expected lifespan B10 reported (25°C)		
				L70B10	L80B10	L90B10
Linea DS-A LV 3250/3750 Lm 3000K CRI97	2094 gr	210x210x140 mm	6 pcs	>60.500 hrs	>60.500 hrs	>60.500 hrs

All values are measured at 230V (+/- 7%)

## NEW STANDARDS REQUIRE NEW LEDS

TM-30 (new color norm): The Illuminating Engineering Society (IES) has published a new Technical Memorandum – TM-30-15 entitled “IES Method for Evaluating Light Source Color Rendition” – that promises to supplant CRI as a color metric. TM-30 relies on separate fidelity and gamut metrics, as well as a set of color samples that is more representative of real-world objects, as opposed to the pastel samples that were primarily used for the baseline CRI metric that was sometimes called Ra. The new color metric is intended to fairly and accurately characterize both LED-based solid-state lighting (SSL) and legacy sources.



### Desaturated

CRI = 82 / R<sub>g</sub> = 94



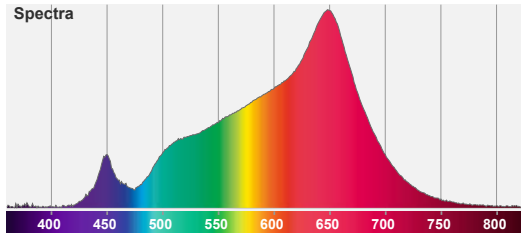
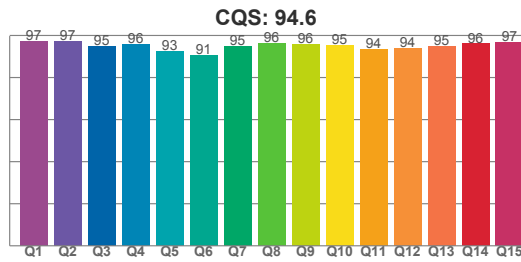
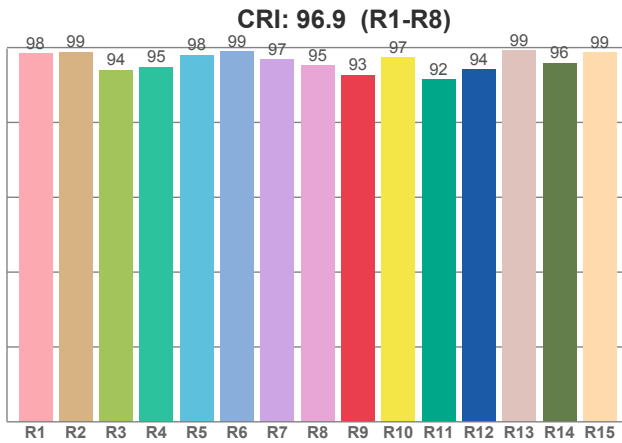
### Red-Enhanced

CRI = 97 / R<sub>g</sub> = 103

## HIGH CRI LED OPTIONS

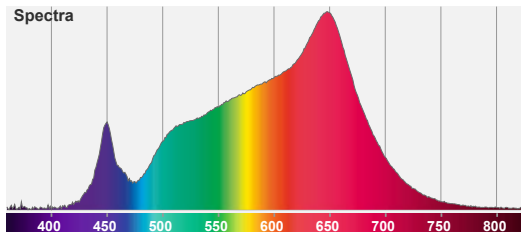
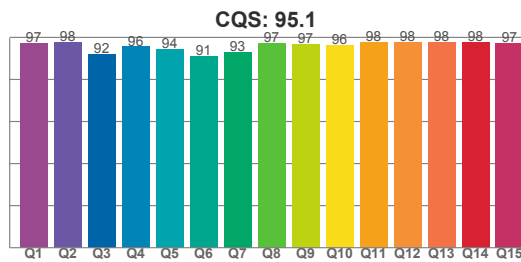
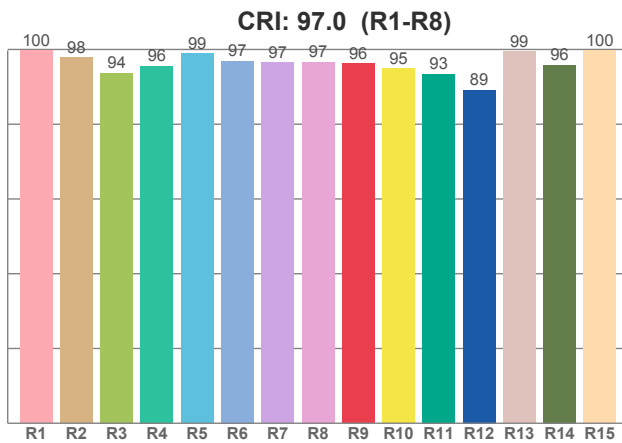
	CCT	CRI	R9	RF	RG	DOWNLIGHTS SMALL			DOWNLIGHTS LARGE		DOWNLIGHTS LARGE		BRAND	ITEM CODE
						MA	LM	LM/W	MA	LM	MA	LM		
<b>CRI82</b>	2700K	82	5	83	94	350	1650	128	700	3400	1200	5300	Bridgelux ksf	51-4087-27
<b>CRI82</b>	3000K	82	7	86	95	350	1725	134	700	3575	1200	5550	Bridgelux ksf	51-4087-30
<b>CRI82</b>	4000K	82	18	84	96	350	1750	136	700	3650	1200	5800	Bridgelux ksf	51-4087-40
<b>CRI90</b>	2700K	92	67	88	104	350	1550	118	700	3150	1200	4700	Bridgelux ksf	51-4088-27
<b>CRI90</b>	3000K	92	67	92	99	350	1600	122	700	3250	1200	4850	Bridgelux ksf	51-4088-30
<b>CRI90</b>	4000K	92	78	92	100	350	1625	124	700	3300	1200	4925	Bridgelux ksf	51-4088-40
<b>CRI97</b>	2700K	97	93	96	103	350	1150	83	800	2300	1400	3425	Lumileds	50-3031-27
<b>CRI97</b>	3000K	97	96	95	103	350	1250	91	800	2500	1400	3750	Lumileds	50-3031-30
<b>CRI97</b>	4000K	97	96	95	103	350	1350	98	800	2700	1400	4050	Lumileds	50-3031-40

**2700K**



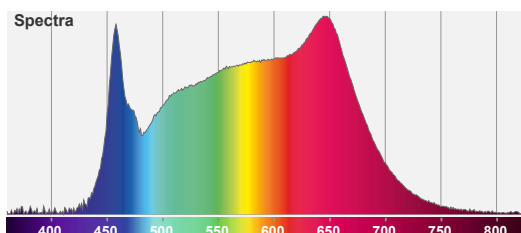
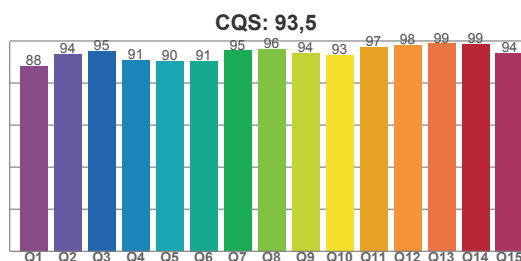
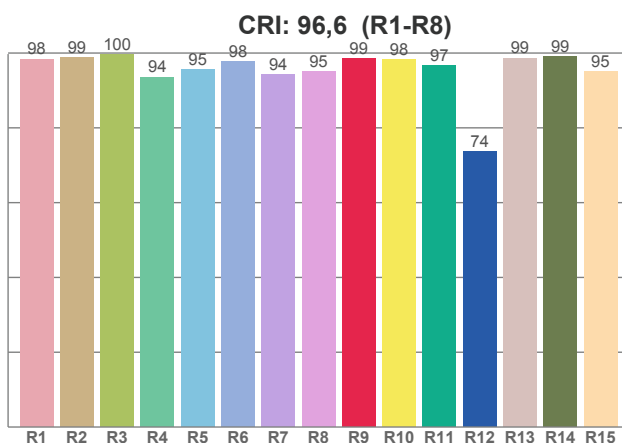
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS
2700K	96.9	92.7	96.0	102.6	94.6

**3000K**



CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS
3000 K	97.0	96.2	95.0	103.3	95.1

**4000K**



CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS
4000K	96.6	98.5	88.3	96.2	93.5