



LEDko EXT Engine FullSpectrum 6+

Product code:
F125T001A

Last update:
19/02/2025



LEDko EXT Engine FullSpectrum 6 + with Lens Tube (not included)

Introducing

● Designed with new electronic and a new OLED display, this spot profile projector is the evolution of the Fullspectrum. The + electronic with advanced LED controller enables a smooth dimming and it offers and higher luminous efficiency.

Key Features



- Red, Green, Blue, Cyan, Lime, Amber light source, 20 bit color mixing
- Color mixing with hue and saturation control
- Green-Magenta adjustment



- High CRI > 95



- CCT from 2.700 K to 10.000 K (through DMX Chart) or up to 20.000 K (through Display)



- IP 65



- LED profile spot
- High lumen flux and flat field



- Swappable lens tubes between 5° - 90°



- Die-cast aluminium (Anti-Salt treatment)



- Custom color on request (optional)



- European Conformity certification

General

● LED Source	RGBCLA COB LED (Red, Green, Blue, Cyan, Lime, Amber) - Color mixing with hue and saturation control
● CCT Range	●●●●● 2.700 K → 20.000 K
● Color Rendition Average	CRI> 95, TLCI> 95
● Green-Magenta Adjustment	Continuously adjustable from full minus-green to full plus-green
● Dimming	8 or 16 bit, 5 selectable curves: Exponential, Logarithmic, Linear, Halo and Standard
● Dimming Smooth Selection	Fast, Slow and Very Slow
● Strobe	Electronic strobe, synchronized, random, pulse effect
● Available Optics	Swappable lens tubes between 5° - 90°
● Camera flicker control/Hz range	Yes: 20.000 Hz
● Calibrated Cob	Yes
● L80 Rating (hours to 80% output)	50.000 Hours
● Pattern projection	Yes
● Pattern size	A or B

Electrical

● Voltage Input	90-230 V, 50/60 Hz, auto-sensing
● Power Consumption	255 W Maximum - 1.19 A at 230 V, 2.38 A at 115 V - cosφ 0.93
● Power Connection	Internal cable without power plug
● Data Connection	In and Out DMX 5 pin locking XLR connectors

Thermal

● Ambient Operating Temperature	-40° - +40°C (-40° - + 104° F)
● Active Electronic Thermal	Active electronic thermal management
● Fan (controllable)	Yes, 4 different settings: Silent, Studio, Auto, DMX regulated

Control

● Protocols	DMX-512, RDM (Remote Device Management), Wireless (optional by LumenRadio)
● RDM configuration	Yes
● DMX Channels	16 / 7 / 1 / Studio / RGB / Fine RGB / Sunrise Mode
● Display	Graphic OLED with on-board selector for quick setting
● Software upload	Through DMX input (With RDM interface code AC10011A001)

Physical

● Mounting Options	Yoke
● Materials	Die-cast aluminium (Anti-Salt treatment)
● Framing System	Four stainless steel shutter blades in a two-plane assembly, 0.40mm (AISI 316)
● Weight	Body: 9.5 Kg / 20.94 lbs - With front barrel: 11 Kg / 24.25 lbs - With lens tube: 13 Kg / 28.66 lbs - With Zoom Profile 15°/35°: 15.5 Kg / 34.17 lbs - With Zoom Profile 25°/50°: 15 Kg / 33.07 lbs
● Length	379.2 mm / 14.92 in
● Height	187 mm / 7.36 in - With bracket: 518.5 mm / 20.41 in
● Width	236 mm / 9.29 in
● IP Rating	IP65
● Color options	Black (standard), custom color on request (optional)

Optics

BC10011A017	Profile Zoom 15°-35°
BC10011A019	Profile Zoom 25°-50°
BC10011A003	Profile Zoom 28°-40°
BC10011A002	Soft Profile Fresnel Zoom 14°-40°
BC10011A001	Soft Profile PC Zoom 11°-38°
BC10011A000	Front Barrel with Burnished Blades
BC10011A042	Lens Tube Profile 10°
BC10011A023	Lens Tube Profile 14°
BC10011A012	Lens Tube Profile 19°
BC10011A013	Lens Tube Profile 26°
BC10011A015	Lens Tube Profile 36°
BC10011A016	Lens Tube Profile 50°
BC10011A024	Lens Tube Profile 70°

General accessories

BC10034A003	4-Leaf Barndoor
BC10011A106	Metal Gobo Holder
BC10011A006	Magnetic Gobo Holder
BC10011A030	Gobo Holder for Glass Gobo
BC10011A010	Iris
BC10011A049	Gobo Holder for Iris Slot
BC10011A047	Hook Clamp, 48-51 mm (Max Load 20 Kg)
BC10011A045	Light Clamp Silver, 48-51 mm (Max 75 Kg)
BC10011A046	Light Clamp Black, 48-51 mm (Max 75 Kg)
BC10011A043	Clamp Silver Flat 13-30 mm/ø15-50 mm (Max 20 Kg)
BC10011A044	Clamp Black Flat 13-30 mm/ø15-50 mm (Max 20 Kg)
BC10029A100	LEDko EXT wireless kit
BC10011A150	Pole Operated Yoke

Accessories for Profile Zoom 15°-35° and 25°-50°

BC10011A028	Donut (190.5 mm)
BC10011A027	Half Top Hat (190.5 mm)
BC10011A029	Top Hat (190.5 mm)
BC10011A040	Color Frame Holder (190.5 mm)

Accessories for Soft Profile Zoom (Fresnel, PC) and Profile Zoom 28°-40°

BC10011A036	Donut (185 mm)
BC10011A035	Half Top Hat (185 mm)
BC10011A037	Top Hat (185 mm)
ACO4204	Color Frame Holder (185 mm)

Accessories for Lens Tube

BC10011A032	Donut (159 mm)
BC10011A031	Half Top Hat (159 mm)
BC10011A033	Top Hat (159 mm)
BC10011A021	Color Frame Holder (159 mm)

16 Channels

01 → Master Dimmer
 02 → Red
 03 → Green
 04 → Blue
 05 → Cyan
 06 → Lime
 07 → Amber
 08 → Strobe Effect
 09 → Dimmer Fine
 10 → Special Functions
 11 → Red Tone
 12 → Green Tone
 13 → Blue Tone
 14 → White Tone
 15 → Green Saturation
 16 → Saturation

7 Channels

01 → Master Dimmer
 02 → Red
 03 → Green
 04 → Blue
 05 → Cyan
 06 → Lime
 07 → Amber

Studio Mode

01 → Master Dimmer
 02 → White Tone
 03 → Green Saturation
 04 → Saturation
 05 → Hue
 06 → Dimmer Fine
 07 → Special Functions

1 Channel

01 → Master Dimmer - Color
 Temperature Settable by Display

RGB Mode

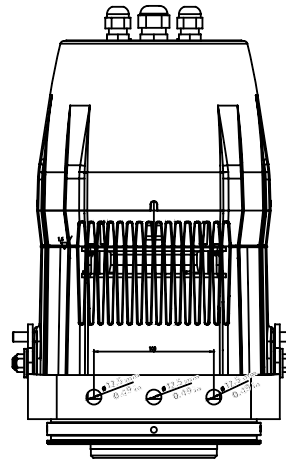
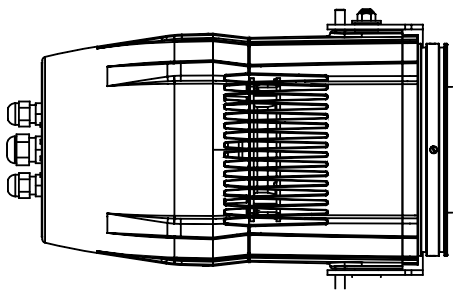
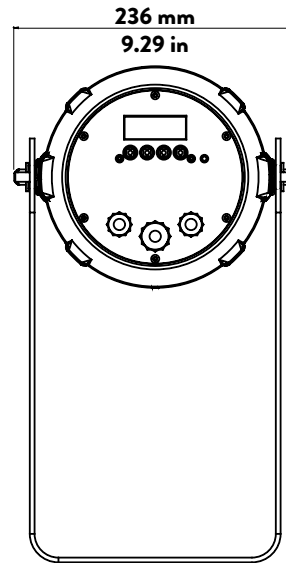
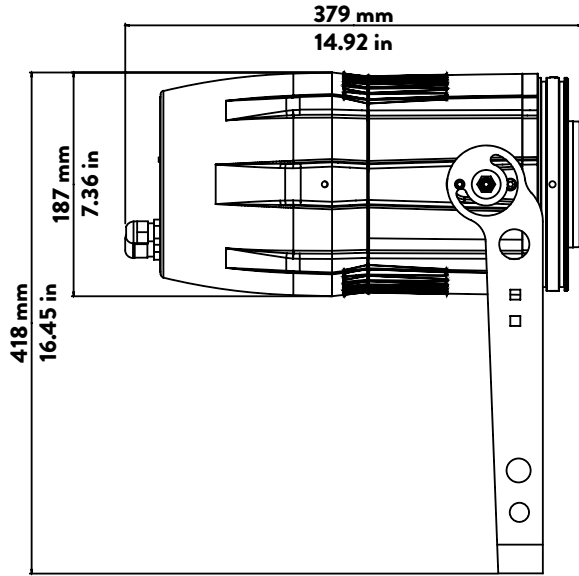
01 → Master Dimmer
 02 → Dimmer Fine
 03 → Red
 04 → Green
 05 → Blue
 06 → White Tone
 07 → Saturation
 08 → Strobe Effect
 09 → Special Functions

Fine RGB Mode

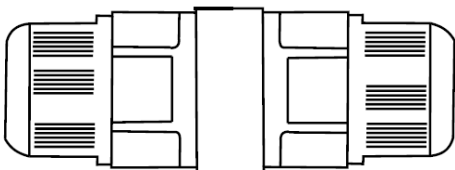
01 → Master Dimmer
 02 → Dimmer Fine
 03 → Red
 04 → Red Fine
 05 → Green
 06 → Green Fine
 07 → Blue
 08 → Blue Fine
 09 → White Tone
 10 → Saturation
 11 → Strobe
 12 → Special Functions

Sunrise Mode

01 → Master Dimmer
 02 → Dimmer Fine
 03 → Proportional CCT
 04 → Step CCT
 05 → Green Saturation
 06 → Special Functions



DMX Signal Junction Connector



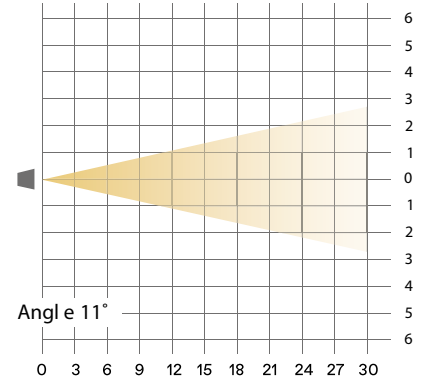
Specification

- DMX 512 STANDARD:
- Pin 1 = Ground Wire
- Pin 2 = Negative (Black)
- Pin 3 = Positive (White)

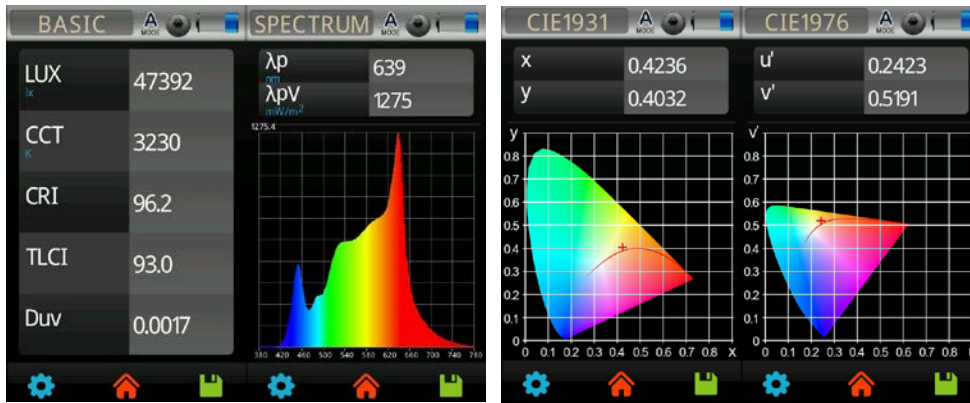
LEDko EXT Engine FullSpectrum 6 HD +

Optic: 14°

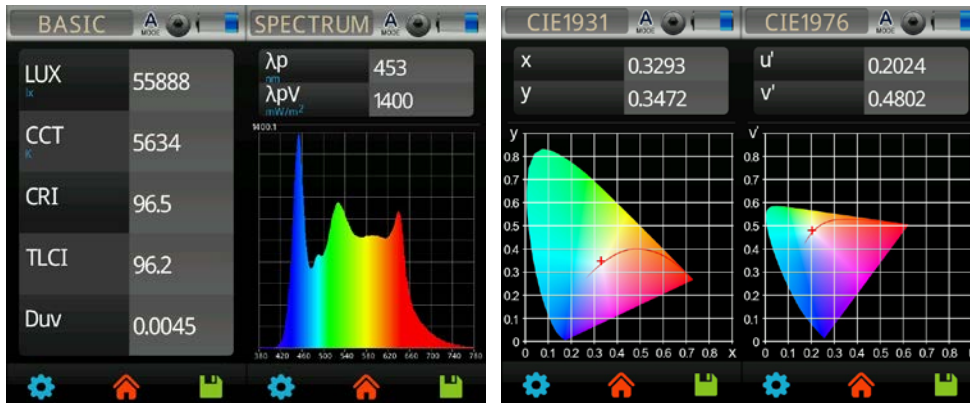
Distance(m)	3	6	9	12	15	18	21	24	27	30	
lux	3.200K	47.392	11.848	5.266	2.962	1.896	1.316	967	741	585	474
	5.600K	55.888	13.972	6.210	3.493	2.236	1.552	1.141	873	690	559
Diameter Ø (m)	0,58	1,16	1,73	2,31	2,89	3,47	4,04	4,62	5,20	5,78	
lux	3.200K	CRI 96.2	TLCI 93								
	5.600K	CRI 96.5	TLCI 96.2								



3.200 K



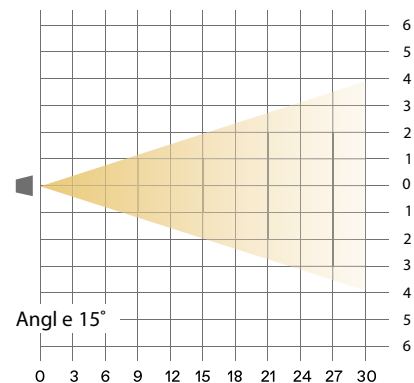
5.600 K



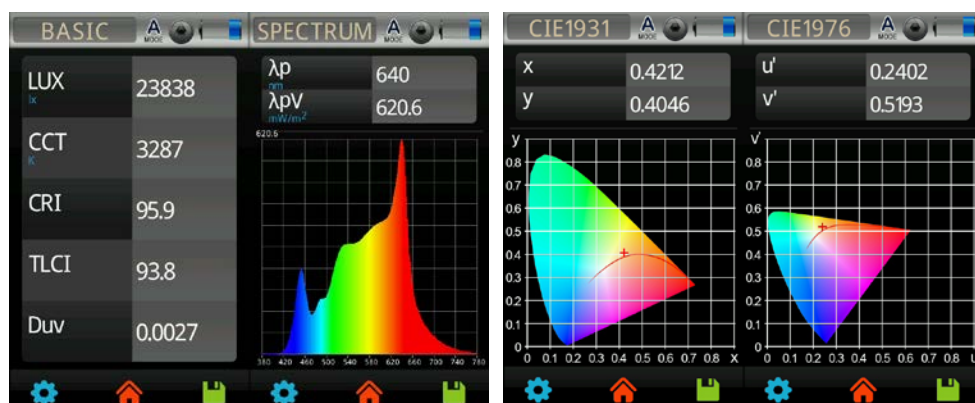
LEDko EXT Engine FullSpectrum 6 HD +

Optic: 19°

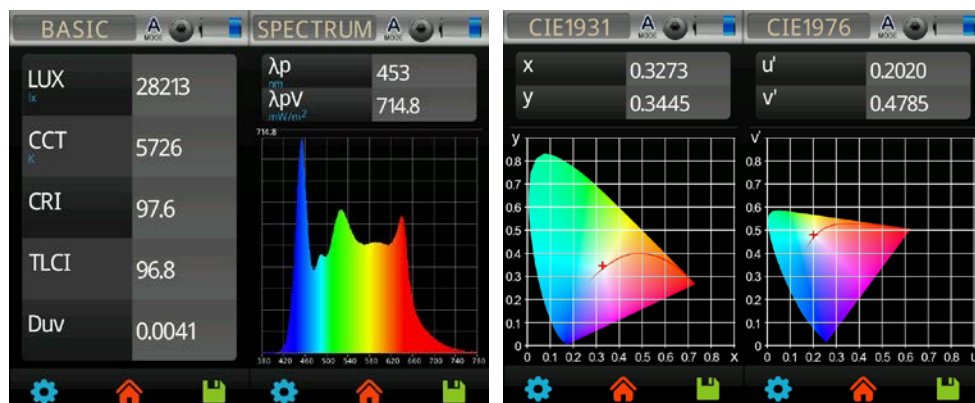
Distance(m)	3	6	9	12	15	18	21	24	27	30	
lux	3.200K	23.838	5.960	2.649	1.490	954	662	486	372	294	238
	5.600K	28.213	7.053	3.135	1.763	1.129	784	576	441	348	282
Diameter Ø (m)	0,79	1,58	2,37	3,16	3,95	4,74	5,53	6,32	7,11	7,90	
lux	3.200K	CRI 95.9	TLCI 93.8								
	5.600K	CRI 97.6	TLCI 96.8								



3.200 K



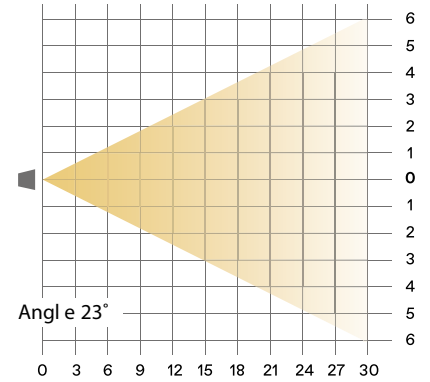
5.600 K



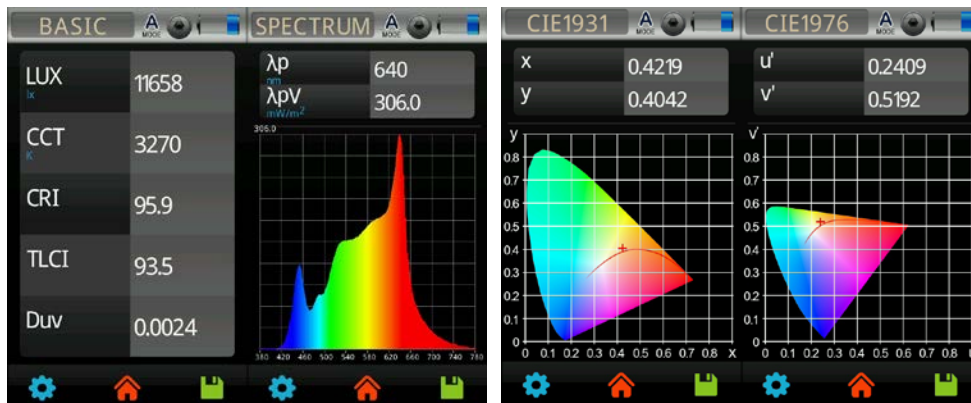
LEDko EXT Engine FullSpectrum 6 HD +

Optic: 26°

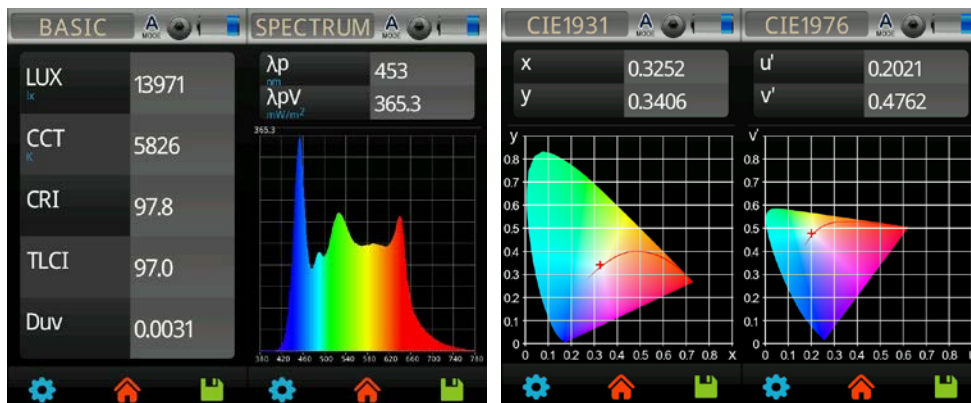
Distance(m)	3	6	9	12	15	18	21	24	27	30	
lux	3.200K	11.658	2.915	1.295	729	466	324	238	182	144	117
	5.600K	13.971	3.493	1.552	873	559	388	285	218	172	140
Diameter Ø (m)	1,22	2,44	3,66	4,88	6,10	7,32	8,54	9,77	10,99	12,21	
lux	3.200K	CRI 95.9	TLCI 93.5								
	5.600K	CRI 97.8	TLCI 97								



3.200 K



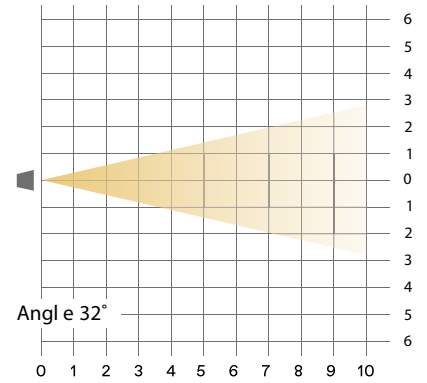
5.600 K



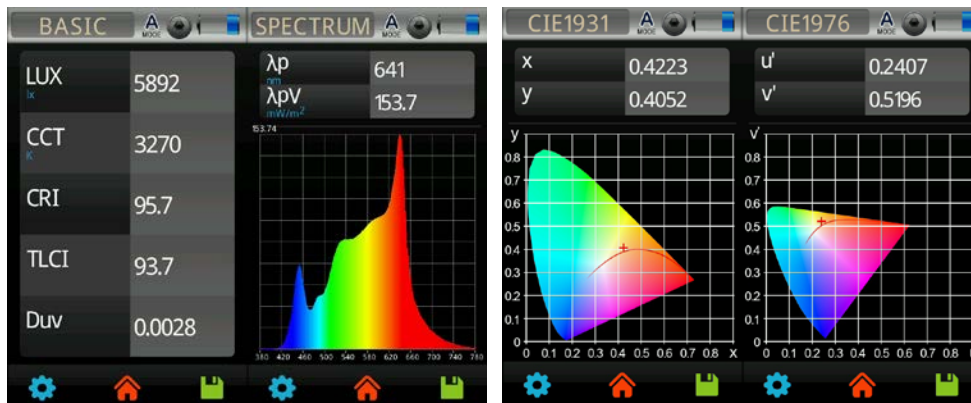
LEDko EXT Engine FullSpectrum 6 HD +

Optic: 36°

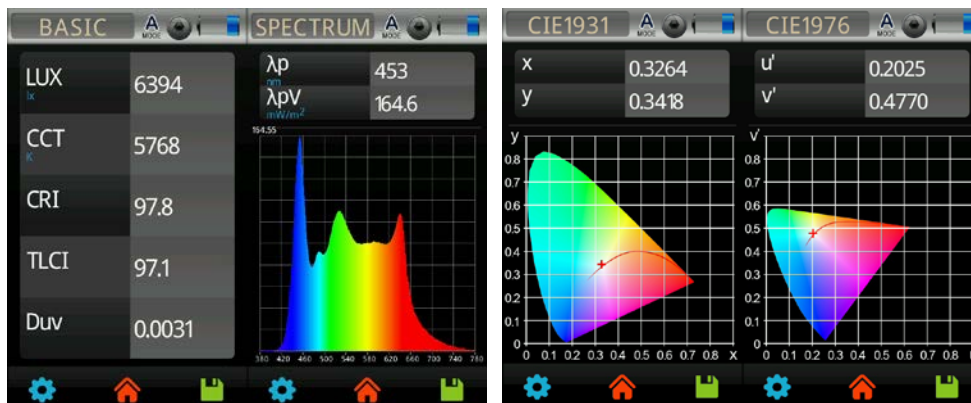
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	53.028	13.257	5.892	3.314	2.121	1.473	1.082	829	655	530
	5.600K	57.546	14.387	6.394	3.597	2.302	1.599	1.174	899	710	575
Diameter Ø (m)	0,57	1,15	1,72	2,29	2,87	3,44	4,01	4,59	5,16	5,73	
lux	3.200K	CRI 95.7	TLCI 93.7								
	5.600K	CRI 97.8	TLCI 97								



3.200 K



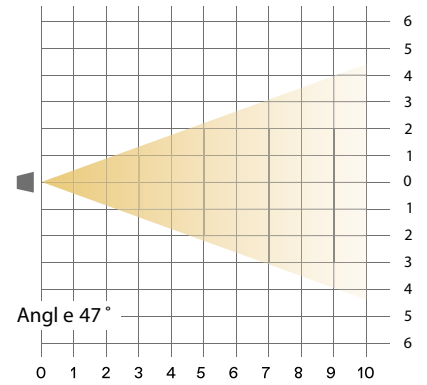
5.600 K



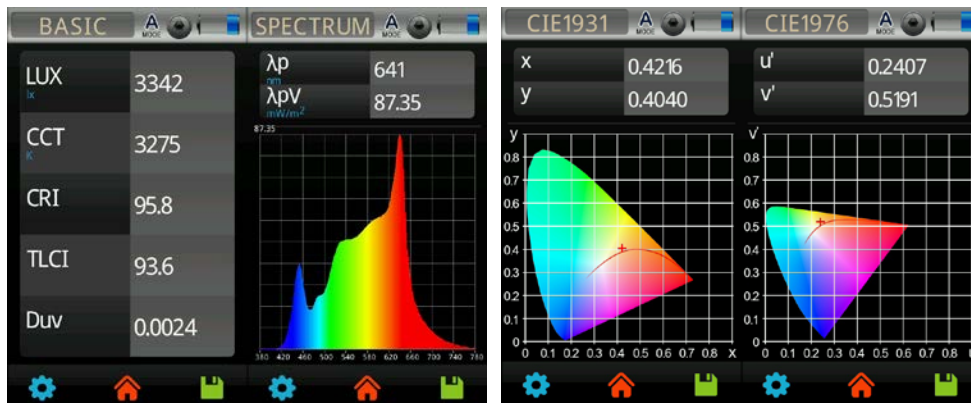
LEDko EXT Engine FullSpectrum 6 HD +

Optic: 50°

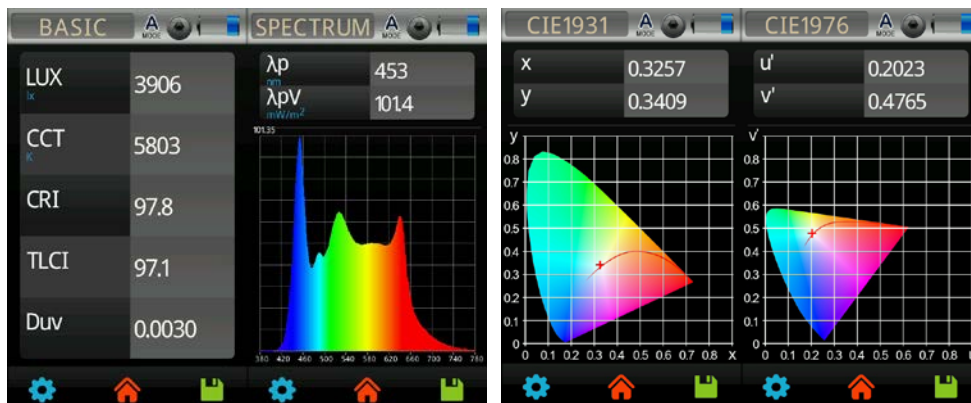
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	30.078	7.520	3.342	1.880	1.203	836	614	470	371	301
	5.600K	35.154	8.789	3.906	2.197	1.406	977	717	549	434	352
Diameter Ø (m)	0,87	1,74	2,61	3,48	4,35	5,22	6,09	6,96	7,83	8,70	
lux	3.200K	CRI 95.8 TLCI 93.6									
	5.600K	CRI 97.8 TLCI 97.1									



3.200 K



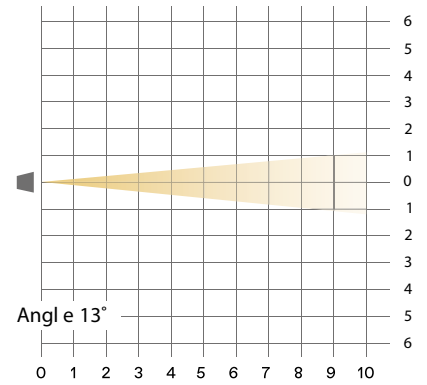
5.600 K



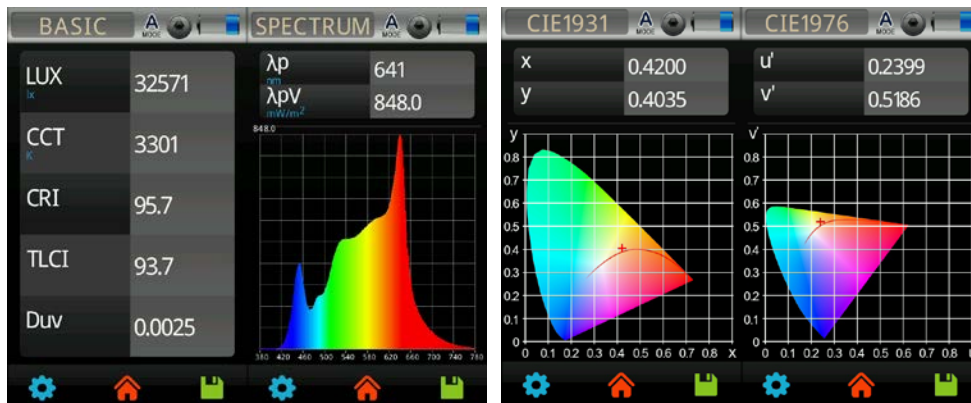
LEDko EXT Engine FullSpectrum 6 HD + - Zoom 15° - 35°

Optic: Minimum Zoom

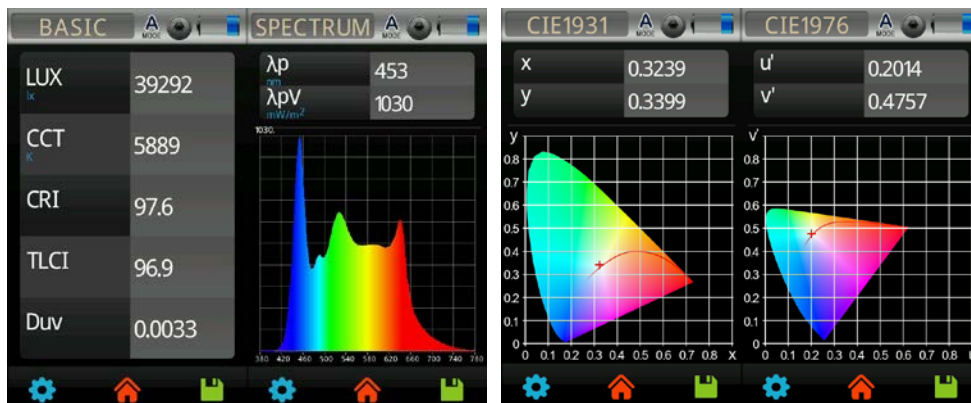
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	293.139	73.285	32.571	18.321	11.726	8.143	5.982	4.580	3.619	2.931
	5.600K	353.628	88.407	39.292	22.102	14.145	9.823	7.217	5.525	4.366	3.536
Diameter Ø (m)	0,23	0,46	0,68	0,91	1,14	1,37	1,60	1,82	2,05	2,28	
lux	3.200K	CRI 95.7	TLCI 93.7								
	5.600K	CRI 97.6	TLCI 96.9								



3.200 K



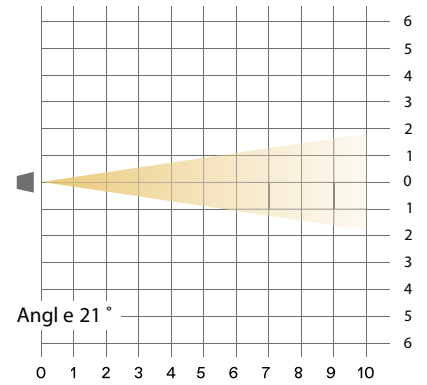
5.600 K



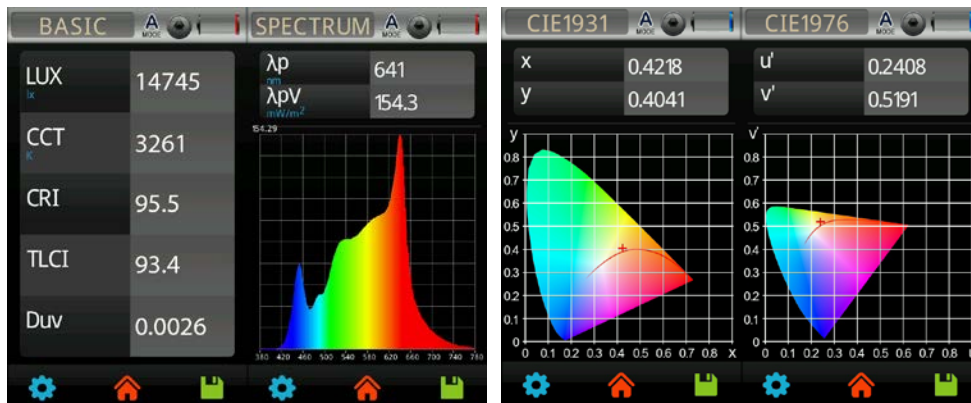
LEDko EXT Engine FullSpectrum 6 HD + - Zoom 15° - 35°

Optic: **Medium Zoom**

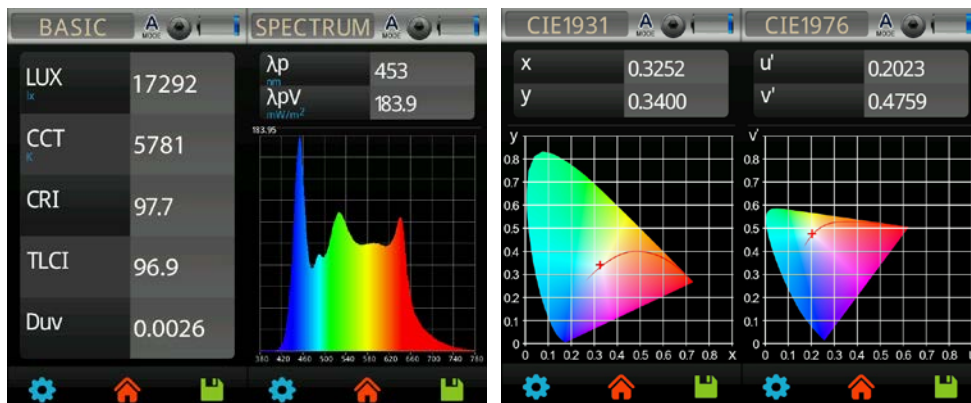
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	132.705	33.176	14.745	8.294	5.308	3.686	2.708	2.074	1.638	1.327
	5.600K	155.628	38.907	17.292	9.727	6.225	4.323	3.176	2.432	1.921	1.556
Diameter Ø (m)	0,37	0,74	1,11	1,48	1,85	2,22	2,59	2,97	3,34	3,71	
lux	3.200K	CRI 95.5	TLCI 93.4								
	5.600K	CRI 97.7	TLCI 96.9								



3.200 K



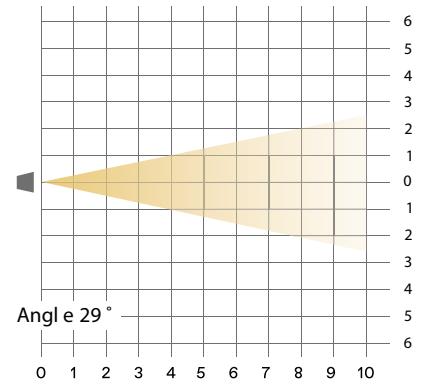
5.600 K



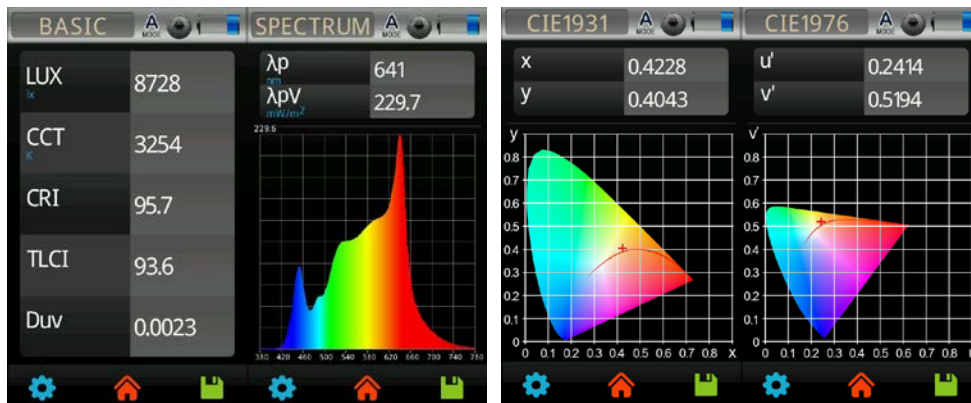
LEDko EXT Engine FullSpectrum 6 HD + - Zoom 15° - 35°

Optic: **Maximum Zoom**

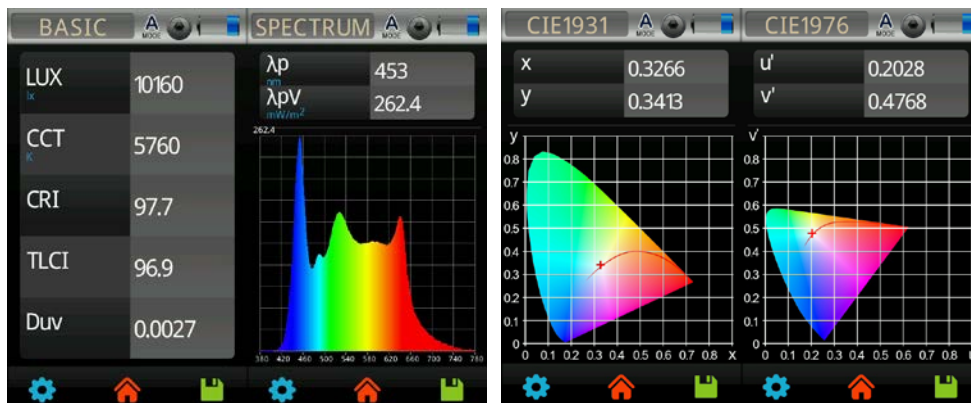
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	78.552	19.638	8.728	4.910	3.142	2.182	1.603	1.227	970	786
	5.600K	91.440	22.860	10.160	5.715	3.658	2.540	1.866	1.429	1.129	914
Diameter Ø (m)	0,52	1,03	1,55	2,07	2,59	3,10	3,62	4,14	4,66	5,17	
lux	3.200K	CRI 95.7	TLCI 93.6								
	5.600K	CRI 97.7	TLCI 96.9								



3.200 K



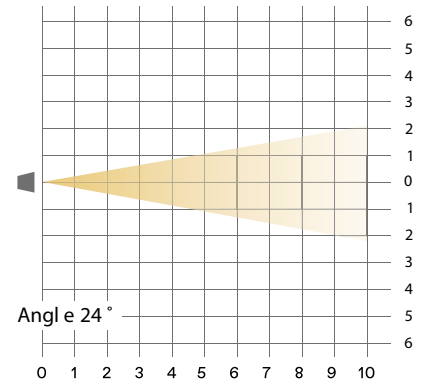
5.600 K



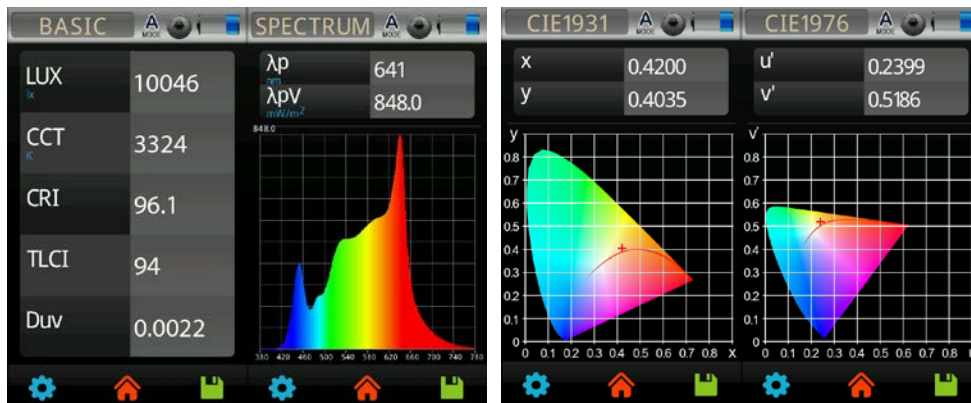
LEDko EXT Engine FullSpectrum 6 HD + - Zoom 25° - 50°

Optic: Minimum Zoom

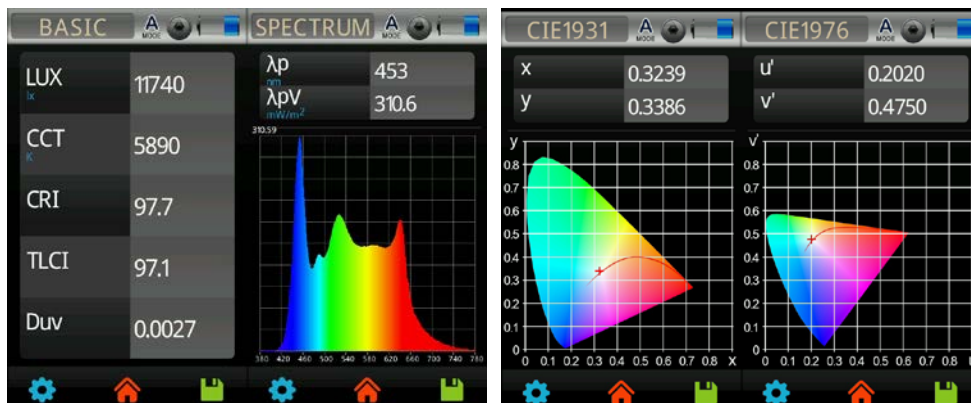
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	90.414	22.604	10.046	5.651	3.617	2.512	1.845	1.413	1.116	904
	5.600K	105.660	26.415	11.740	6.604	4.226	2.935	2.156	1.651	1.304	1.057
Diameter Ø (m)	0,43	0,85	1,28	1,70	2,13	2,55	2,98	3,40	3,83	4,25	
lux	3.200K	CRI 96.1	TLCI 94								
	5.600K	CRI 97.7	TLCI 97.1								



3.200 K



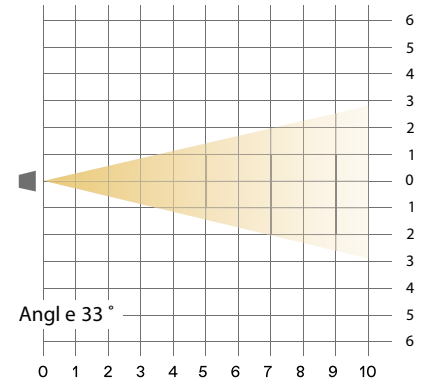
5.600 K



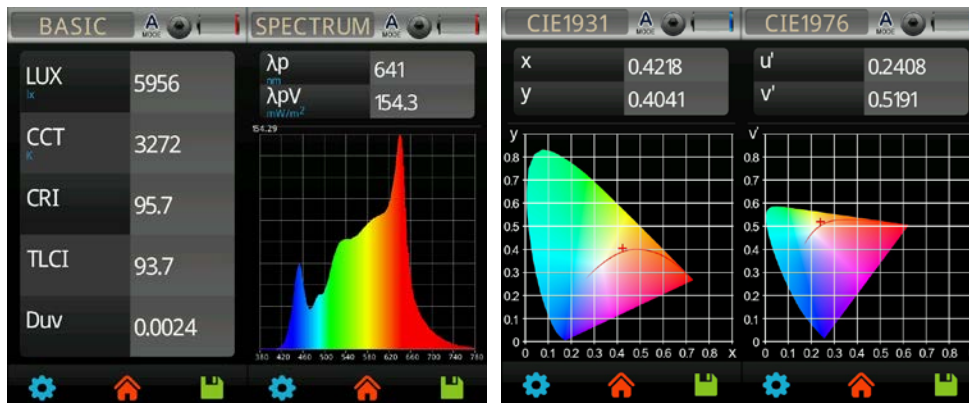
LEDko EXT Engine FullSpectrum 6 HD + - Zoom 25° - 50°

Optic: **Medium Zoom**

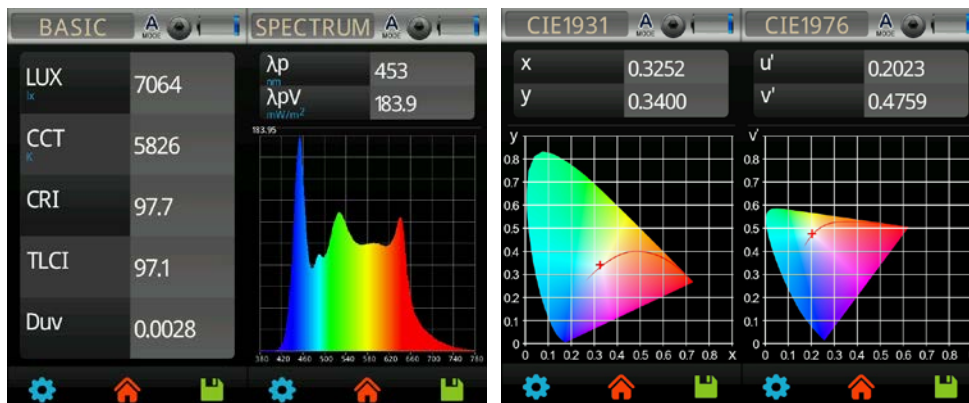
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	53.604	13.401	5.956	3350	2144	1489	1094	838	662	536
	5.600K	63.576	15.894	7.064	3.974	2.543	1.766	1.297	993	785	636
Diameter Ø (m)	0,59	1,18	1,78	2,37	2,96	3,55	4,15	4,74	5,33	5,92	
lux	3.200K	CRI 95.7	TLCI 93.7								
	5.600K	CRI 97.7	TLCI 97.1								



3.200 K



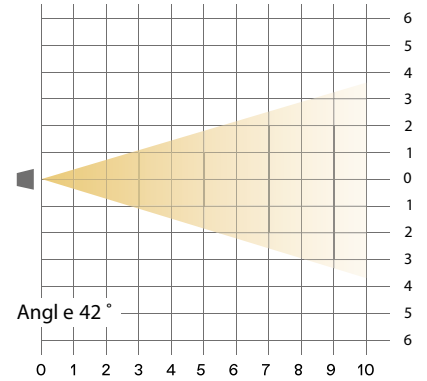
5.600 K



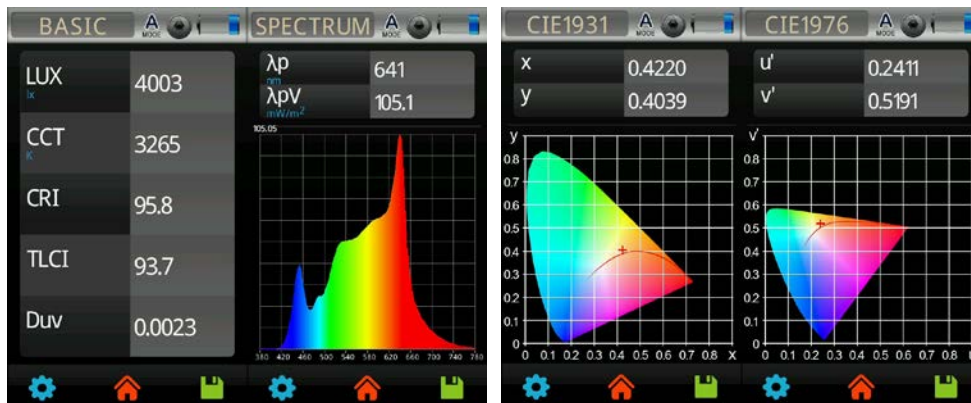
LEDko EXT Engine FullSpectrum 6 HD + - Zoom 25° - 50°

Optic: Maximum Zoom

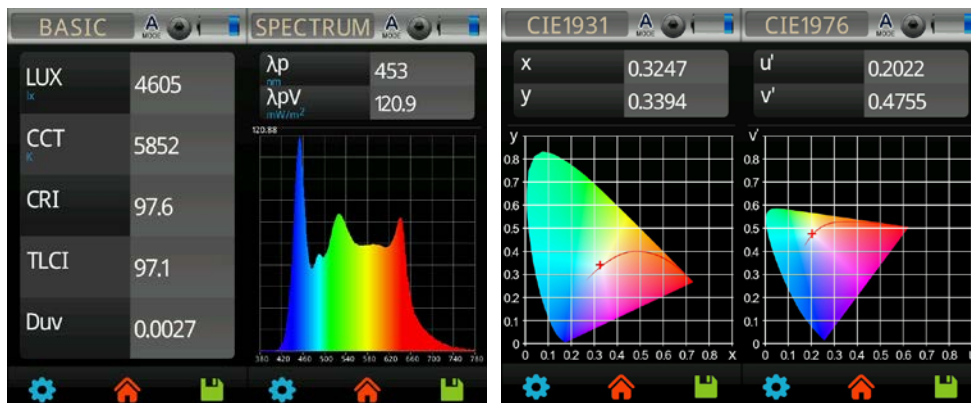
Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	3.200K	36.027	9.007	4.003	2.252	1.441	1.001	735	563	445	360
	5.600K	41.445	10.361	4.605	2.590	1.658	1.151	846	648	512	414
Diameter Ø (m)	0,77	1,54	2,30	3,07	3,84	4,61	5,37	6,14	6,91	7,68	
lux	3.200K	CRI 95.8	TLCI 93.7								
	5.600K	CRI 97.6	TLCI 97.1								



3.200 K



5.600 K



● Coemar Lighting S.r.l.

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Coemar reserves the right to change specifications without prior notice.

Last Update: 19 February 2025 - vrs. 2.4