

## **Spec Sheet**

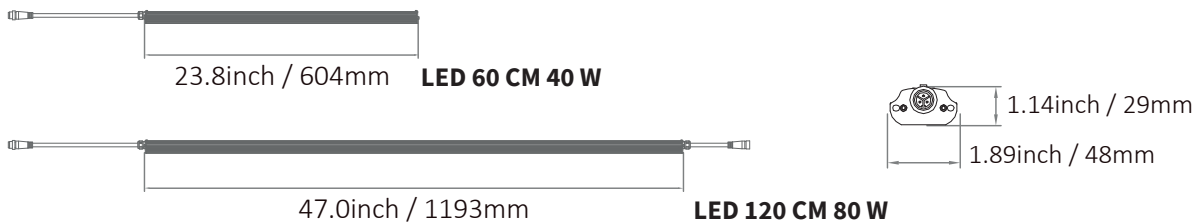
**LED Belysning 60 cm 40 W**

**LED Belysning 120 cm 80 W**

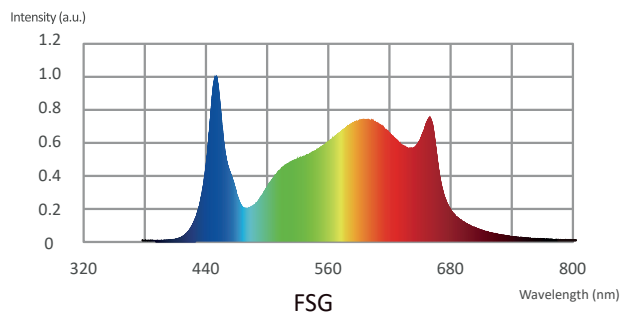
## Product features

- Linear and slim design
- OSRAM LEDS, LM-80
- Surface mounted or pendant
- ETL, DLC, UL8800, CE certification
- Input Voltage: 120-277VAC
- 120 cm 60 W can be connected in series
- Flexible installation ways, can work as top lighting, side lighting or interlighting

## Product Dimension



## Spectra



### Full Spectrum: FSG

FSG Spectrum, also known as a full Spectrum, offers photon emission across the PAR 400-700nm continuous wavelength range. The overall color temperature is controlled at natural white 4000K. With high blue and red, this tuneful Spectrum is highly recommended to most vegetables and crops and could cover the whole growing cycle.

## LED Belysning 60 cm 40 W

Power Consumption (incl. driver)	40W
AC Input Voltage	AC 120-277V , 50/60Hz
Input Current	Max 0.37A@120VAC; Max 0.22A@208VAC Max 0.20A@230VAC; Max 0.16A@277VAC
Power Factor	>0.9
Spectrum	FSG
Efficacy (μmol/J)	2.6
PPF (μmol/s)	104
Heat Output	136 BTU/h
Thermal Management	Passive
Operating Temperature	-4 - 113T(-20 - 45°C)
Storage Temperature	-40 - 176F(-40 - 80°C)
Dimension (L*W*H)	23.8*1.89*1.14inch (604*48*29mm )
Weight	1.54lbs(0.7kg)
Total Harmonic Distortion (THD)	< 15%
Lifetime	L90: > 50,000hrs L70: >78,000hrs
IP Rating/Location Rating	IP65/Wet
Certifications	ETL / UL 8800 / CE
Warranty	2 Year Standard Warranty

## LED Belysning 60 cm 40 W Nominal Electrical AC Input

AC Voltage	120V	208V	230V	277V
AC Current	0.35A	0.20A	0.18A	0.16A
AC Power	41.6W	41.4W	40.8W	41.2W
Power Factor	0.993	0.971	0.967	0.936

## LED Belysning 120 cm 80 W

Power Consumption (incl. driver)	80W
AC Input Voltage	AC 120-277V , 50/60Hz
Input Current	Max 0.74A@120VAC; Max 0.43A@208VAC Max 0.39A@230VAC; Max 0.32A@277VAC
Power Factor	>0.9
Spectrum	FSG
Efficacy (μmol/J)	2.6
PPF (μmol/s)	208
Heat Output	272 BTU/h
Thermal Management	Passive
Operating Temperature	-4 - 113T(-20 - 45°C)
Storage Temperature	-40 - 176F(-40 - 80°C)
Dimension (L*W*H)	47.0*1.89*1.14inch (1193*48*29mm )
Weight	3.09lbs(1.4kg)
Total Harmonic Distortion (THD)	< 15%
Lifetime	L90: > 50,000hrs L70: >78,000hrs
IP Rating/Location Rating	IP65/Wet
Certifications	ETL / UL 8800 / CE / DLC
Warranty	2 Year Standard Warranty

## LED Belysning 120 cm 80 W Nominal Electrical AC Input

AC Voltage	120V	208V	230V	277V
AC Current	0.69A	0.40A	0.36A	0.31A
AC Power	81.9W	81.4W	80.6W	81.0W
Power Factor	0.992	0.971	0.964	0.934
Power Daisy Chain Quantity	13pcs	23pcs	25pcs	30pcs

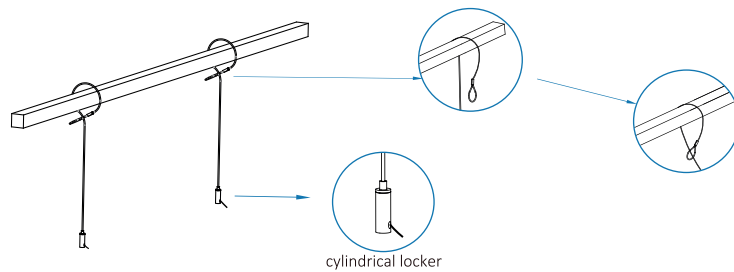
# Installation

## A Pendant Mounted

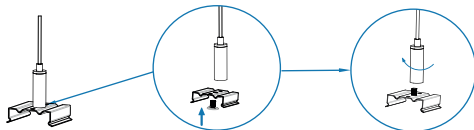
### Accessories:



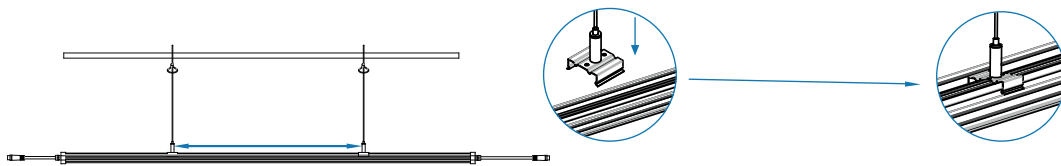
1. Position the steel wire rope and adjust the rope according to desired mounting height.



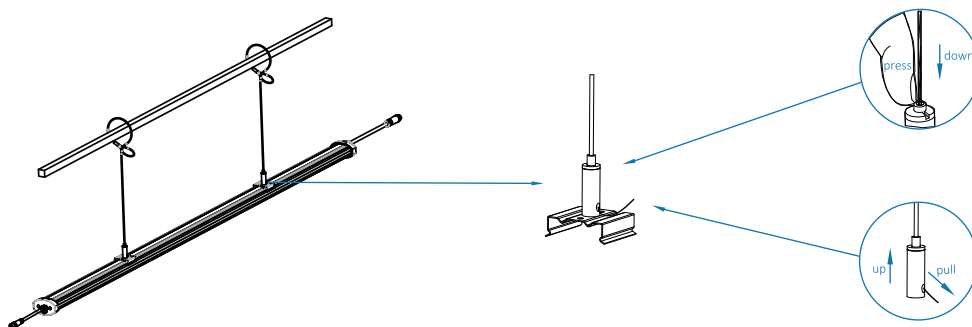
2. Fix the clip on the steel wire rope's cylindrical locker with the provided screw.



3. Fix the clips on the light bar's heat sink.



4. Adjust the spacing of the clips depends on needs. Pull the steel wire rope to adjust the fixture up or press the locker to release or lower down the fixture.



## B Surface Mounted

### Accessories:



Anchors

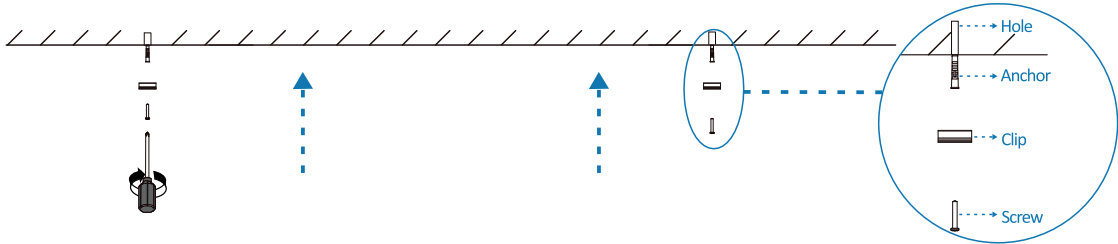


Screws

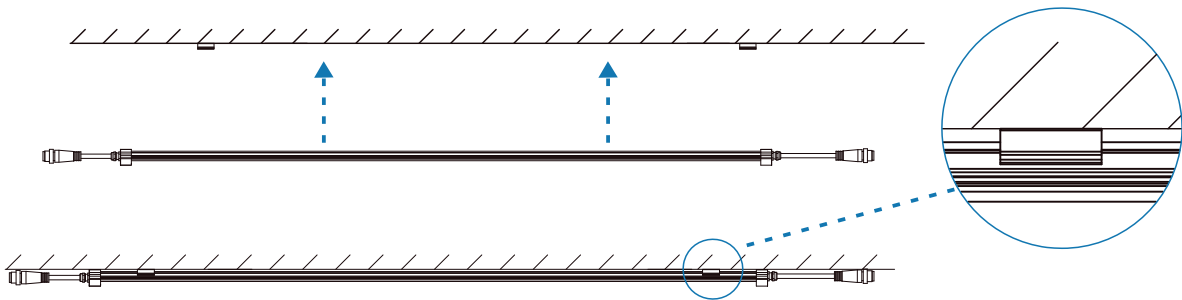


Clips

1. Drill holes in an overhead structure. For drywall or similar materials, insert anchors. Screw through the clips' holes into the structure or anchors.



2. Insert the bar into the clips.



# PPFD distribution\* for Impecta's LED lighting 60 cm, 40 W

A square corresponds to an illuminated area of 15x15 cm. Height refers to the distance between the light source and the illuminated surface.

## Height: 30 cm

90 cm	7	14	27	35	39	33	24	12	8
	11	27	60	95	115	99	63	27	11
	15	44	132	247	271	252	160	58	23
	15	49	145	254	294	273	168	58	18
	12	34	75	119	139	139	95	43	14
	8	15	31	45	59	55	41	20	11
135 cm									

## Height: 45 cm

11	18	29	44	48	41	35	26	15
15	29	51	87	89	79	69	42	24
20	39	78	142	149	124	106	60	32
20	45	85	129	153	144	106	62	31
16	36	75	97	110	102	82	49	27
13	22	37	52	58	59	49	32	19

## Height: 60 cm

13	21	31	38	43	42	35	26	17
17	27	45	58	67	63	52	37	23
20	34	57	75	89	86	106	46	29
22	37	58	78	88	86	69	48	29
19	32	49	65	71	71	60	42	27
15	23	35	46	49	50	42	31	20

\*PPFD distributions are measured with a Full-spectrum Quantum meter, model MQ-500, from Apogee. The measurements are made in a room without windows, without additional lighting, and without reflective walls."

# PPFD distribution\*

## for Impecta's LED lighting 120 cm 80 W

A square corresponds to an illuminated area of 15x15 cm. Height refers to the distance between the light source and the illuminated surface.

### Height: 30 cm

120 cm	11	15	20	22	23	22	24	21	17	13	9
	19	32	47	54	60	56	52	51	40	27	15
	42	87	114	136	141	139	138	128	102	60	29
	68	157	236	280	278	275	281	267	210	103	42
	80	180	271	302	299	288	296	286	213	106	44
	49	96	143	168	157	164	165	177	121	67	30
	26	43	57	73	70	71	67	64	47	33	17
	15	21	25	30	33	33	27	30	22	15	10
165 cm											

### Height: 45 cm

19	27	34	41	41	42	41	37	30	21	15
33	47	63	71	74	77	79	65	55	37	25
52	82	106	127	133	132	132	115	94	66	35
65	113	154	181	185	184	184	170	135	88	50
66	111	163	184	190	190	188	172	140	93	56
51	84	119	137	145	143	142	136	109	72	42
32	49	69	78	80	84	81	78	61	47	28
21	29	37	45	51	50	47	45	40	26	18

### Height: 60 cm

23	32	45	43	47	48	48	44	37	27	21
36	47	60	68	72	74	73	67	55	41	30
48	65	86	95	102	105	101	95	75	59	37
54	78	102	121	127	129	124	114	92	68	45
59	82	107	121	128	127	124	112	89	68	46
49	70	87	102	110	109	105	97	75	57	36
35	49	62	73	77	77	73	66	55	43	29
27	35	43	49	53	54	49	47	36	29	20

\*PPFD distributions are measured with a Full-spectrum Quantum meter, model MQ-500, from Apogee. The measurements are made in a room without windows, without additional lighting, and without reflective walls."



# LM-80 report of Osram

IES TM-21-11 Projection

160522W4

## Appendix A: Lumen Maintenance Projection (IES TM-21-11)

For Information Only!

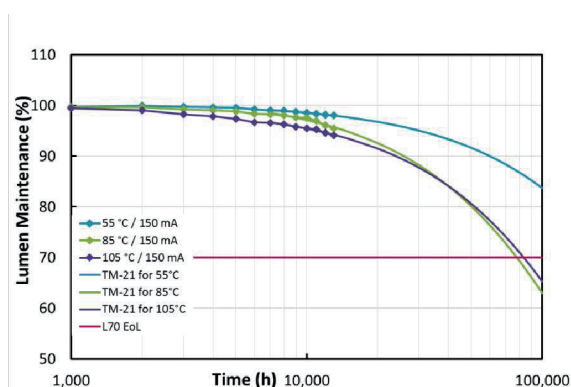
### 1. General Information

Description of LED light source tested	DURIS E 5 GW JDSRS1.EC
Sample size per temperature	30
LED drive current used in the test	150 mA
Test duration	13,000 hours
Test duration used for projection	8,000 hours to 13,000 hours

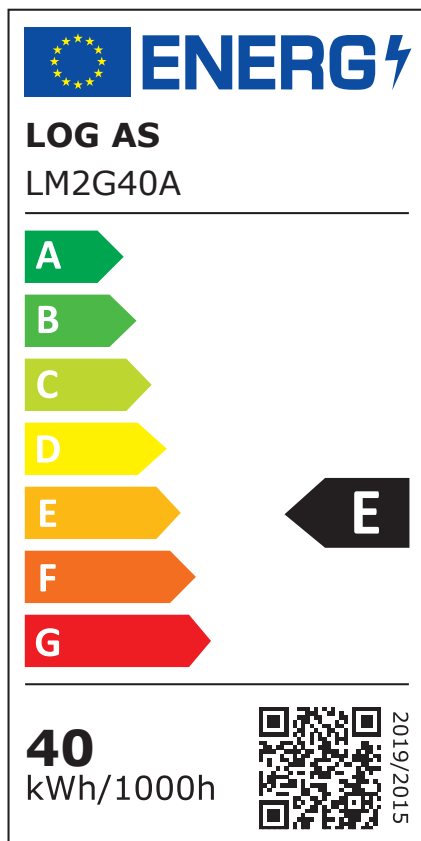
### 2. Projection Data

	I	II	III
Case temperature (solder point)	$T_s = 55\text{ }^\circ\text{C}$	$T_s = 85\text{ }^\circ\text{C}$	$T_s = 105\text{ }^\circ\text{C}$
$\alpha$	1.818E-06	4.821E-06	4.227E-06
B	1.004E+00	1.019E+00	9.957E-01
Reported L70	>78,000 hours	77,955 hours	>78,000 hours

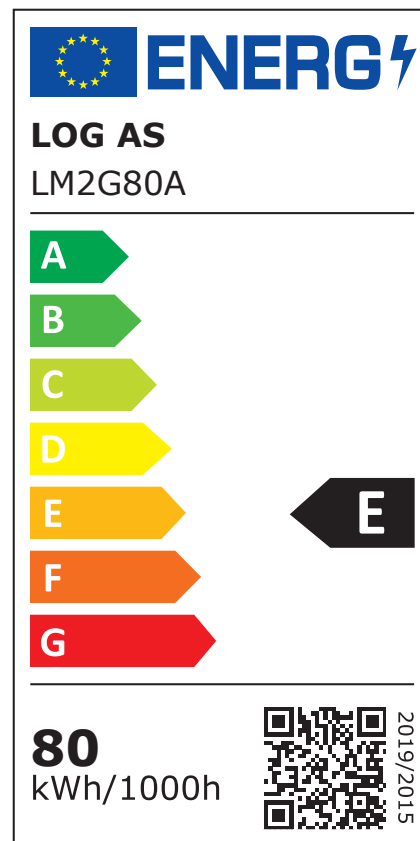
### 3. Graphic chart



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LED Belysning 60 cm 40 W



LED Belysning 120 cm 80 W