

# Luma

Traffic Routes Residential /Street Area Tunnel & Underpass City Centre Architectural & Landscape  
Sports Lighting Large Outdoor Industrial Area Agricultural Area City+ Planning



## The Vision becomes Reality

Experience gained from over 400 Million operating hours of the Stela range and the application of Directa and CoolLED technology brings you Luma - the high performance and cost saving solution to the challenges of traffic route lighting.

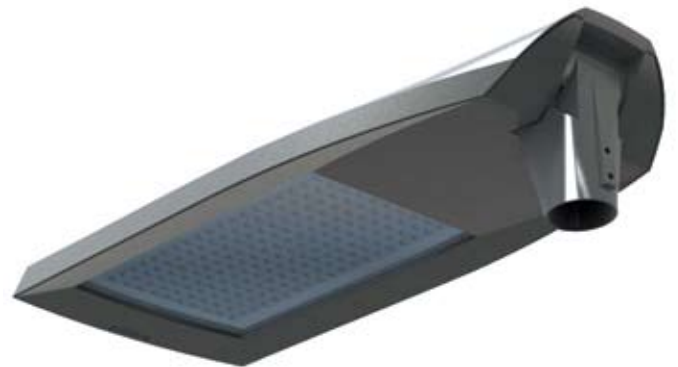


### Fit and Forget

Upgrade if you want to not because you have to.

- Service Life up to 100,000 hours, L80
- Energy and Maintenance Cost Savings
- Up-grade possible, but not necessary.
- Replaces all traditional light sources for traffic routes.
- Post Top or Side Entry Mounting
- Analogue or Dali based CMS compatible
- Two body sizes Luma 3 and Luma 2.
- 60 to 200 LED's for optimum energy savings and life
- 5,000 to 40,000 lumen packages to meet all lighting classes
- Multiple lens distributions to suit alternate geometries
- Overlay lighting principle to maximise uniformity

- Replaces everything up to 400W SON
- ME6 to ME1 applications
- Constant Flux and Programmable Dimming Options
- Saves up to 40% Energy on ME Class Routes
- True G1 to G4 (G5 & G6 – in 2012) Glare Rating
- Recommended 6 Year Cleaning Cycle to align with the column test





## LUMA 3

100/120/140/160/180/200 LED

3 lenses = 3 distributions

Replaces up to SON-T 400W

ME1, ME2, ME3, ME4

Tilt post top 0°, +5°, +10°

Tilt side entry -10°, -5°, 0°, +5°, +10°

Gx, G1, G2, G3, G4, (G5, G6 Available in 2012)

350mA, CW, NW <24000lm, L80 ~ 100.000h WW ≤21000lm

LUMA 3 (350mA) - Post Top	Brief Description
L3200/24R1CW/C/PT	LUMA 3 - 200 LED, 24k lumens, R1 lens, Cool White, Post Top
L3200N/24R1CW/C/PT	As above, but with nema socket
L3200/24R1CW/C/PT/12A	As above, but with SS12A Mini Cell
L3180/21R1CW/C/PT	LUMA 3 - 180 LED, 21k lumens, R1 lens, Cool White, Post Top
L3180N/21R1CW/C/PT	As above, but with nema socket
L3180/21R1CW/C/PT/12A	As above, but with SS12A Mini Cell
L3160/19R1CW/C/PT	LUMA 3 - 160 LED, 19k lumens, R1 lens, Cool White, Post Top
L3160N/19R1CW/C/PT	As above, but with nema socket
L3160/19R1CW/C/PT/12A	As above, but with SS12A Mini Cell
L3140/17R1CW/C/PT	LUMA 3 - 140 LED, 17k lumens, R1 lens, Cool White, Post Top
L3140N/17R1CW/C/PT	As above, but with nema socket
L3140/17R1CW/C/PT/12A	As above, but with SS12A Mini Cell

LUMA 3 (350mA) - Side Entry	Brief Description
L3200/24R1CW/C/SE	LUMA 3 - 200 LED, 24k lumens, R1 lens, Cool White, Side Entry
L3200N/24R1CW/C/SE	As above, but with nema socket
L3200/24R1CW/C/SE/12A	As above, but with SS12A Mini Cell
L3180/21R1CW/C/SE	LUMA 3 - 180 LED, 21k lumens, R1 lens, Cool White, Side Entry
L3180N/21R1CW/C/SE	As above, but with nema socket
L3180/21R1CW/C/SE/12A	As above, but with SS12A Mini Cell
L3160/19R1CW/C/SE	LUMA 3 - 160 LED, 19k lumens, R1 lens, Cool White, Side Entry
L3160N/19R1CW/C/SE	As above, but with nema socket
L3160/19R1CW/C/SE/12A	As above, but with SS12A Mini Cell
L3140/17R1CW/C/SE	LUMA 3 - 140 LED, 17k lumens, R1 lens, Cool White, Side Entry
L3140N/17R1CW/C/SE	As above, but with nema socket
L3140/17R1CW/C/SE/12A	As above, but with SS12A Mini Cell



## LUMA 2

60/80/100/120 LED

3 lenses = 3 distributions

Replaces up to SON-T 250W

ME1, ME2, ME3, ME4, ME5, ME6

Tilt post top 0°, +5°, +10°

Tilt side entry -10°, -5°, 0°, +5°, +10°

Gx, G1, G2, G3, G4, (G5, G6 Available in 2012)

350mA, CW, NW <14000lm, L80 ~ 100.000h  
WW ≤11000lm

LUMA 2 (350mA) - Post Top	Brief Description
L2120/15R1CW/C/PT	LUMA 2 - 120 LED, 15k lumens, R1 lens, Cool White, Post Top
L2120N/15R1CW/C/PT	As above, but with nema socket
L2120/15R1CW/C/PT/12A	As above, but with SS12A Mini Cell
L2100/12R1CW/C/PT	LUMA 2 - 100 LED, 12k lumens, R1 lens, Cool White, Post Top
L2100N/12R1CW/C/PT	As above, but with nema socket
L2100/12R1CW/C/PT/12A	As above, but with SS12A Mini Cell

LUMA 2 (350mA) - Side Entry	Brief Description
L2120/15R1CW/C/SE	LUMA 2 - 120 LED, 15k lumens, R1 lens, Cool White, Side Entry
L2120N/15R1CW/C/SE	As above, but with nema socket
L2120/15R1CW/C/SE/12A	As above, but with SS12A Mini Cell
L2100/12R1CW/C/SE	LUMA 2 - 100 LED, 12k lumens, R1 lens, Cool White, Side Entry
L2100N/12R1CW/C/SE	As above, but with nema socket
L2100/12R1CW/C/SE/12A	As above, but with SS12A Mini Cell



Typical spacing using 0.75MF

Up to 26klm, 100,000 hours flux

**Greater spacing possible using alternite values,**  
contact WRTL for further information.

Luma 3 Polar Distribution  
24klm 200LED  
R1 Lens  
LIC G4



Luma 3 Polar Distribution  
24klm 200LED  
R2 Lens  
LIC G4



Luma 3 Polar Distribution  
24klm 200LED  
R3 Lens  
LIC G4



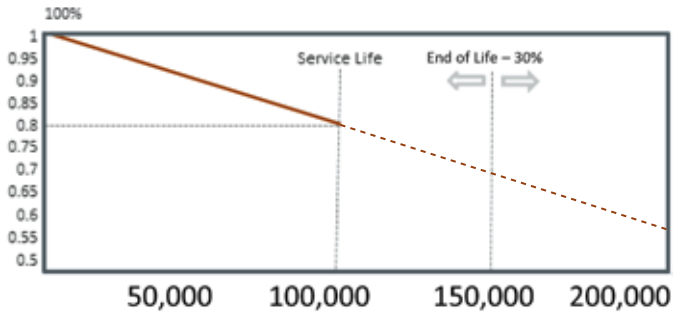
Single sided with  2 x Lane widths of:	Class	Column Heights	3	3.5	4	4.5	5
	ME2	10	41	41	40	38	35
	ME3a	12	41	39	38	36	34
		8	34	34	34	33	32
		10	41	41	42	42	42
		12	49	49	49	49	49
	ME3b	8	38	38	38	37	36
		10	46	46	47	47	47
		12	53	52	53	51	49
	ME3c	8	40	40	40	41	39
		10	50	51	51	50	50
	ME4a	8	38	38	38	37	36
		10	46	46	47	47	47
Opposite with  2 x Lane widths of:	Class	Column Heights	3	3.5	4	4.5	5
	ME2	10	42	42	43	43	44
	ME3a	12	51	50	51	51	51
		8	34	35	35	36	36
		10	42	42	43	43	44
		12	51	50	51	51	51
	ME3b	8	39	39	39	40	40
		10	48	48	48	49	49
		12	57	57	58	57	58
	ME3c	8	42	42	43	44	43
		10	51	52	52	53	53
	ME4a	8	39	39	39	40	40
		10	48	48	48	49	49
Staggered sided with  2 x Lane widths of:	Class	Column Heights	3	3.5	4	4.5	5
	ME2	10	32	31	31	31	30
	ME3a	12	38	37	36	35	33
		8	26	25	23	22	0
		10	32	31	31	31	30
		12	39	39	38	37	37
	ME3b	8	30	29	29	26	23
		10	39	37	37	36	35
		12	48	45	44	44	43
	ME3c	8	33	33	32	32	28
		10	43	43	42	42	42
	ME4a	8	30	29	29	26	23
		10	39	37	37	36	35



# Luminaire Maintenance Factor

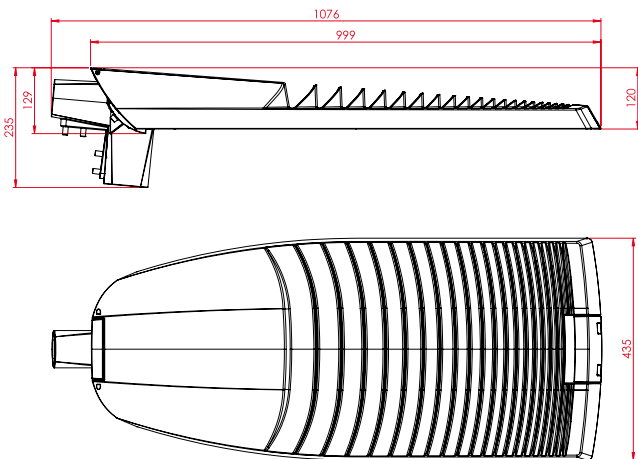
With Luma, improved luminaire maintenance factors can be used, the table below shows suggested values. These should be multiplied by 0.80 for full life calculations or 0.90 where the value at half life is being used.

Cleaning Interval	Luminaire Maintenance Factor		
	IP 6x		
Months	High Pollution	Medium Pollution	Low Pollution
12	0.95	0.98	0.99
24	0.93	0.97	0.97
36	0.92	0.96	0.96
48	0.90	0.95	0.95
60	0.88	0.94	0.94
72	0.87	0.93	0.93

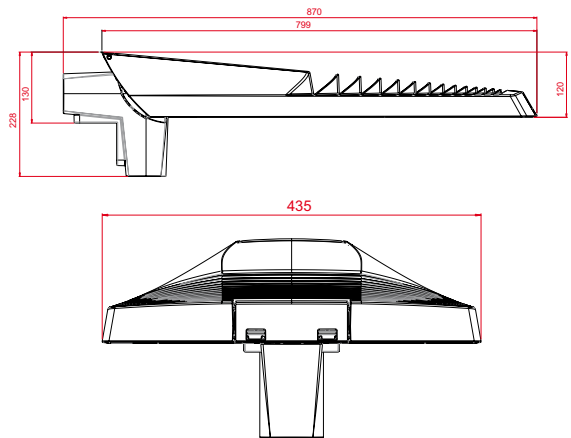


# Dimensions

LUMA 3



LUMA 2



# Ingress Protection and Impact Resistance

IP66 to EN60529, IK10 Housing

# Materials and Finish

Enclosure Material Aluminium: LM6 / DIN 320.  
 Lens System: PMMA Acrylic and toughened glass.

Standard Paint Finish RAL 9007.  
 Other RAL Colours available on request.

# Construction Standards

Designed in accordance with EN60529-2-3 Road Lighting and Conforms to CE Marking Directives including EMC Requirements, EN61000-3-2, EN61000-3-3, EN55015

LUMA	Maximum No. Of LEDs	Weight (kg)	Dimensions	Windage		100,000 hour Lumen	Constant Flux Power Range
				SCx	M²		
3	200	18 to 21kg	1076X435X120	0.077	0.079	12klm to 33klm	85W to 340W
2	120	14 to 16kg	870X435X120	0.066	0.067	5klm to 21klm	54W to 226W

Data is subject to change



**WRTL Exterior Lighting Ltd**

Waterside Park  
Golds Hill Way  
Tipton  
West Midlands  
DY4 0PU

Tel. 0121 521 1234  
Fax. 0121 521 1250

[www.wrtl.co.uk](http://www.wrtl.co.uk)  
[sales@wrtl.co.uk](mailto:sales@wrtl.co.uk)