

MARUT S G2

DATASHEET | SPECIFICATIONS



CHARACTERISTIC

Elegant outdoor LED luminary with an integrated surge protection and adjustable joint with the possibility of integration into "Smart City".

USE

Pedestrian zones Outdoor areas

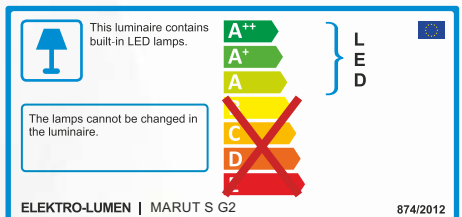
Road classes I., II. and III.

Sidewalks Cycle paths



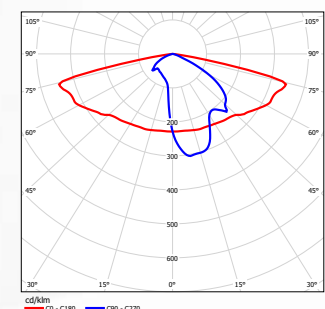
TECHNICAL SPECIFICATIONS

ELECTRICAL PARAMETERS	
Light source	» LED
AC voltage	» AC 220–240 V / 50–60 Hz
Connection	» leading out cable » leading out cable with connector (G) » disconnect terminal block (O) » without cable (WO)
Driver	» electronic driver with surge protection L/N-Ground 10 kV
Surge protection	» additional surge protection 10 kV (S)
Fuse	» fuse 6,3 A (J)
Dimming	» non-dimmable (not labeled) » DALI » night dimming (A) » preparation for wireless communication NEMA (N) » Zhaga (Z) or 2x Zhaga (Z2)
Sensor	» motion sensor (on request)
Constant lumen output	» CLO (C)
LIGHT PARAMETERS	
Optical system	» roads (Mxx) » roads (Lxx) » directional (Pxx) » area (Uxx) » pedestrian crossing (ZLx/ZPx) » AMBER module (Nxx) » AMBER optics (Alxx) » BACK light mask (BM2) » combined optics (Kxx)
Light distribution	» direct
Color rendering index	» Ra > 70 » Ra > 80
Color temperature	» AMBER » 2 200 K » 2 700 K » 3 000 K » 4 000 K » 5 000 K » TW
Service life	» > 100 000 hours (L90B10)
CONSTRUCTION	
Housing	» aluminum cast
Color	» RAL 7015/9006
Surface	» matte
Cover	» tempered glass
SAFETY	
Protection class	» I » II
Ambient operating temperature	» -40 / +55 °C
Ingress protection	» IP 66
Impact protection	» IK 09
EMC	» YES
Vibration test	» YES
Corrosion test	» YES
Certification	» ENEC » ENEC+ » Zhaga-D4i » IDA Dark Sky Approved
MOUNTING	
Method	» pole or outrigger (48–60 mm) » adapter (60–76) (on request) » adjustable joint ± 15°
Recommended height	» up to 8 m
Additional equipment	» external aperture (on order)



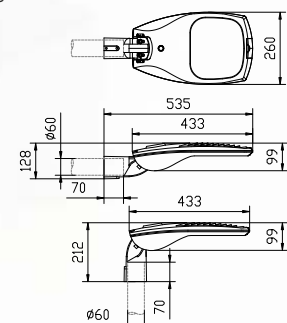
LIGHT DISTRIBUTION CURVE

MARUT S G2 M03 8k0 840



DIMENSIONS

MARUT S



VARIANTS

DATASHEET MARUT S G2

VARIANTS (chip 3535)	AMBER module (Nxx)			WARM WHITE 722		WARM WHITE 727			WARM WHITE 730			NEUTRAL WHITE 740			Luminaire efficiency (lm/W)	Kg**	
	Name	Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)	Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)			
min			max	min				max	min		max	min		max	min	max	Až do
MARUT S G2 Mxx 1k0	11,2	845	935	8,5	898	7,9	820	907	7,9	870	963	7,2	842	931	129	4,0	
MARUT S G2 Mxx 1k5	—	—	—	12,7	1 350	11,6	1 255	1 388	10,9	1 272	1 407	10,2	1 280	1 416	139	4,0	
MARUT S G2 Mxx 2k0	21	1 690	1 870	16	1 872	13,9	1 640	1 814	13,9	1 740	1 925	12,6	1 683	1 862	148	4,0	
MARUT S G2 Mxx 2k5	—	—	—	19,7	2 286	17,8	2 125	2 351	16	2 075	2 295	14,8	2 041	2 258	153	4,0	
MARUT S G2 Mxx 3k0	32,1	2 510	2 777	23,4	2 700	20,9	2 510	2 777	19,6	2 560	2 832	18,3	2 561	2 833	155	4,0	
MARUT S G2 Mxx 3k5	—	—	—	28,1	3 213	24,5	2 936	3 249	23,2	2 995	3 314	21,5	2 984	3 302	154	4,0	
MARUT S G2 Mxx 4k0	44,6	3 313	3 665	33	3 663	28,1	3 346	3 702	26,8	3 438	3 804	24,3	3 350	3 706	153	4,0	
MARUT S G2 Mxx 5k0	53,6	4 242	4 693	43,4	4 572	35,5	4 150	4 591	33	4 166	4 609	31	4 200	4 647	150	4,0	
MARUT S G2 Mxx 6k0	65	4 969	5 498	48	5 490	45,5	5 112	5 655	41,1	5 003	5 535	38,3	5 049	5 586	146	4,0	
MARUT S G2 Mxx 7k0	—	—	—	55,4	6 174	48,2	5 827	6 447	45,2	5 898	6 525	40,8	5 733	6 343	155	4,0	
MARUT S G2 Mxx 8k0	—	—	—	66*	7 164	55,4	6 601	7 303	51,7	6 684	7 396	49,2	6 827	7 533	154	4,0	
MARUT S G2 Mxx 9k0	—	—	—	—	—	66*	7 672	8 488	59,6*	7 513	8 312	55,5	7 574	8 379	151	4,0	
VARIANTS (chip 5050)	AMBER optics (ALxx)			WARM WHITE 722		WARM WHITE 727			WARM WHITE 730			NEUTRAL WHITE 740			Luminaire efficiency (lm/W)	Kg**	
Name	Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)	Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)		Power consumption (W)	Luminaire output flux (lm)				
		min	max				min	max		min	max		min	max	min	max	min
MARUT S G2 Lxx 1k0	7,3	751	824	—	—	7,3	848	915	7,3	833	952	7,3	944	1 018	140	4,0	
MARUT S G2 Lxx 1k5	9,8	1 085	1 191	—	—	9,8	1 224	1 320	9,8	1 285	1 386	9,8	1 363	1 471	150	4,0	
MARUT S G2 Lxx 2k0	12,5	1 495	1 641	—	—	12,5	1 696	1 829	12,5	1 774	1 914	12,5	1 879	2 027	162	4,0	
MARUT S G2 Lxx 2k5	14,8	1 821	1 999	—	—	15,3	2 220	2 395	14,8	2 159	2 329	14,8	2 289	2 470	167	4,0	
MARUT S G2 Lxx 3k0	17,5	2 162	2 374	—	—	18	2 570	2 772	17,5	2 570	2 772	17,5	2 718	2 933	168	4,0	
MARUT S G2 Lxx 3k5	19,5	2 427	2 664	—	—	21,6	3 033	3 272	20,8	3 061	3 302	19,5	3 050	3 291	169	4,0	
MARUT S G2 Lxx 4k0	23,1	2 885	3 168	—	—	24,5	3 435	3 706	23,1	3 422	3 692	23,1	3 627	3 913	169	4,0	
MARUT S G2 Lxx 5k0	28	3 483	3 825	—	—	31,1	4 339	4 682	30,6	4 475	4 828	28	4 379	4 724	169	4,0	
MARUT S G2 Lxx 6k0	34,1	4 158	4 565	—	—	38	5 244	5 658	35,9	5 157	5 564	34,1	5 227	5 639	165	4,0	
MARUT S G2 Lxx 7k0	37,5	4 784	5 252	—	—	42,5	6 153	6 639	41,3	6 197	6 686	37,5	6 013	6 488	173	4,0	
MARUT S G2 Lxx 8k0	45,2	5 667	6 222	—	—	49,3	7 053	7 610	46	6 817	7 355	45,2	7 123	7 685	170	4,0	
MARUT S G2 Lxx 9k0	49,3	6 237	6 848	—	—	55,7	7 866	8 487	51,8	7 735	8 346	49,3	7 840	8 459	172	4,0	
PEDASTRAIN CROSSING				POWER CONSUMPTION (W)				TYPICAL LUMINOUS FLUX (lm)				LUMINAIRE EFFICIENCY		SERVICE LIFE			
Name				Color temperature (K)													
Ra 70				4 000 (B124)		5 000 (T3Q51)		min		max		lm/W		L90B10 (hrs.)		Kilogram*	
MARUT S G2 ZP01 6k0 7x0 (B124 / T3Q51)				38,3		38,3		5 049		5 586		146		> 100 000		4,0	
MARUT S G2 ZP01 9k0 7x0 (B124 / T3Q51)				55,5		55,5		7 574		8 379		151		> 100 000		4,0	
MARUT S G2 ZP02 6k0 7x0 (B124 / T3Q51)				38,3		38,3		5 049		5 586		146		> 100 000		4,0	
MARUT S G2 ZP02 9k0 7x0 (B124 / T3Q51)				55,5		55,5		7 574		8 379		151		> 100 000		4,0	
MARUT S G2 ZP03 6k0 7x0 (B124 / T3Q51)				38,3		38,3		5 049		5 586		146		> 100 000		4,0	
MARUT S G2 ZP03 9k0 7x0 (B124 / T3Q51)				55,5		55,5		7 574		8 379		151		> 100 000		4,0	
MARUT S G2 ZP06 5k0 7x0 (B124 / T3Q51)				31		31		4 200		4 647		150		> 100 000		4,0	
MARUT S G2 ZP06 7k0 7x0 (B124 / T3Q51)				46,6		46,6		5 898		6 525		140		> 100 000		4,0	
MARUT S G2 ZL04 6k0 7x0 (B124 / T3Q51)				38,3		38,3		5 049		5 586		146		> 100 000		4,0	
MARUT S G2 ZL04 9k0 7x0 (B124 / T3Q51)				55,5		55,5		7 574		8 379		151		> 100 000		4,0	
MARUT S G2 ZL06 5k0 7x0 (B124 / T3Q51)				31		31		4 200		4 647		150		> 100 000		4,0	
MARUT S G2 ZL06 7k0 7x0 (B124 / T3Q51)				46,6		46,6		5 898		6 525		140		> 100 000		4,0	

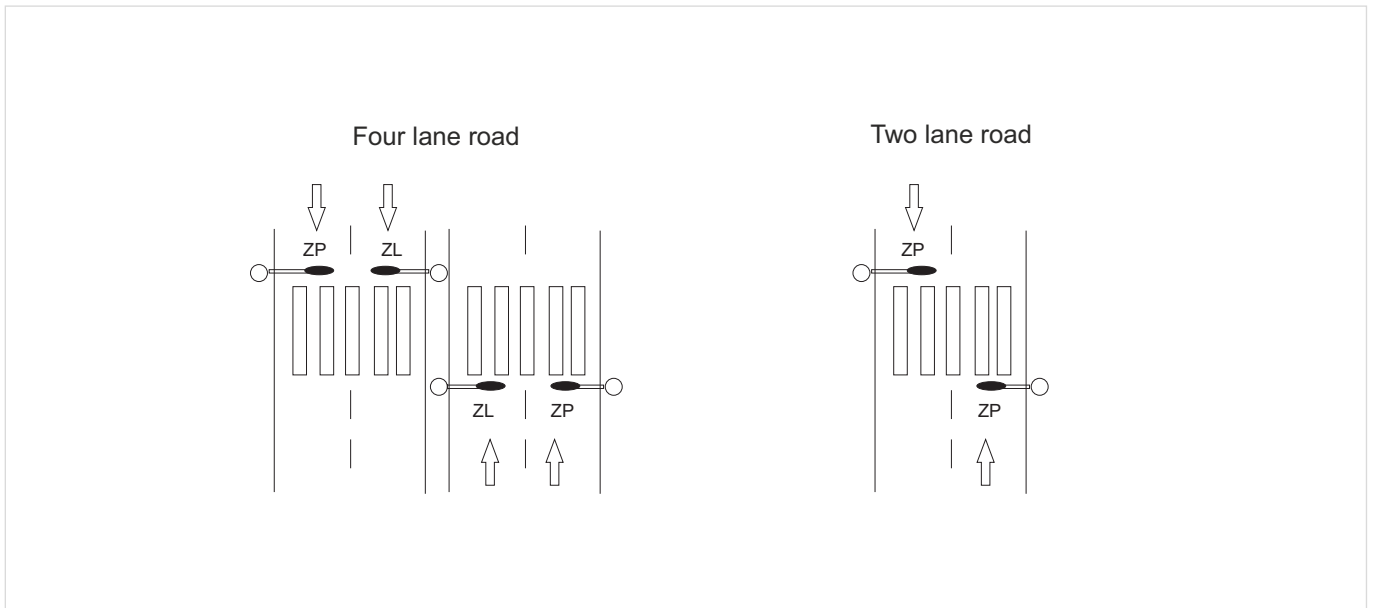
* Can not be produced under ENEC licence	IDA Dark Sky fixture seal of approval relates to $\leq 3\ 000\ K$
** Weight may vary depending on the luminaire variant	To meet IDA requirements, the luminaires must be installed horizontally with the road
Luminaire ambient temperature TQ 25 °C	Optical and electrical parameters tolerance $\pm 10\ \%$
Initial color consistency: $\leq 5\ SDCM$	

The term AMBER in lighting technology refers to light with a minimum amount of the blue part of the light spectrum.

AMBER module - the light emitted from the LED chips on the module is already free of the blue part of the light spectrum (standard PMMA optics).

AMBER optics - the optical system absorbs the blue part of light from the LED module and transmits the remaining light spectrum (special AMBER optics).

When using the CLO function, the initial power and luminous flux is 10 % lower than the value shown in the table. LDT curves with CLO function have the letter "C" at the end of their marking.



CODE DESCRIPTION

MARUT	S	II	G2	M01	8k0	730	B124	45CAZ2	OSJG	H3S	ENEC		
												Name	
												Class	
												Without marking	Class I
												II	Class II
												Luminaire generation	
												Optical system	
												M01	Roads
												L01	Roads
												P01	Directional
												U01	Area
												ZP1/ZL1	Pedestrian crossings
												K01	Combined optics
												BM2	Backlight mask
												Luminous flux marking (source)	
												Ra 70 / 3 000 K	
												LED module marking	
												B	LED module type
												1	
												2	
												4	Mask type
												Driver type	
												43	OSRAM 4DIM (DALI) + 3 pole terminal block
												45	OSRAM 4DIM (DALI) + 5 pole terminal block
												45P	OSRAM 4DIM (DALI) + 5 pole terminal block + presence detection
												4	OSRAM 4 DIM
												1	OSRAM 1DIM (noDALI)
												D	OSRAM DX – Dexal (for Zhaga connector)
												C	Constant luminous flux (CLO)
												A	AstroDim
												Z	Zhaga connector, 4 pin (Dexal driver)
												Z2	2x Zhaga connector, 4 pin (Dexal driver)
												N	NEMA connector, 7 pin (4 DIM driver)
												O	Disconnect terminal block
												S	Surge protection 10 kV
												J	Fuse 6,3 A
												G	Gesis connector
												H	H05(07)RN-F cable (1 mm ²)
												C	CYKY cable (1,5 mm ²)
												WO	Without cable
												2	2 core cable
												3	3 core cable
												5	5 core cable
												S	Standard – 25 cm length of cable (led out of the luminaire)
												1	1 meter (length in whole meters)
												ENEC certification	