MARUT S G2

DATASHEET | SPECIFICATIONS

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 2× Zhaga (Z2)
Sensor	» motion sensor (on request)
Constant lumen output	» CLO (C)
LIGHT PARAMETERS	
Optical system	» roads (Mxx) » roads (Lxx) » directional (Pxx) » area (Uxx)
	» pedastrian crossing (ZLx/ZPx) » combined optics (Kxx)
	» BACK light shades (BL1/BL2) » FRONT light shades (FL1/FL2)
Light distribution	» direct
Color rendering index	» Ra > 70 » Ra > 80
Color temperature	» BLUE FREE (AMBER) » 2 200 K » 2 700 K » 3 000 K » 4 000 K » 5 000 K
	» 5 700 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	» Zhaga-D4i » IDA Dark Sky Approved
RoHS	» YES
REACH	» YES
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 shades CPZ (on order)

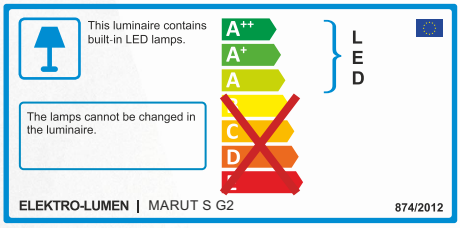
CHARACTERISTIC

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

USE

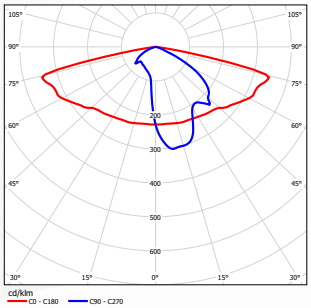
Pedestrian zones | Outdoor areas | Road classes I., II. and III. | Sidewalks | Cycle paths

LED | DIMM AD | DALI | IP 66 | IK 09 | EMC | Vibration



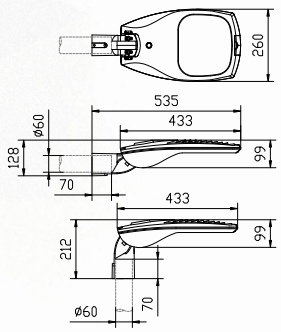
LIGHT DISTRIBUTION CURVE

MARUT S G2 M03 8k0 840



DIMENSIONS

MARUT S



VARIANTS

DATASHEET MARUT S G2

VARIANTS (chip 3535)	POWER (W) Color temperature (K)				LUMINAIRE OUTPUT FLUX (lm)		LUMINAIRE EFFICIENCY (lm/W)	SERVICE LIFE (hrs.)	WEIGHT
Catalog name	2200K Ra 70 U500 < 6.5%	2700K Ra 70 U500 < 10.5%	3000K Ra 70 U500 < 15%	4000K Ra 70 U500 < 23%	min	max	Up to	L90B10	kg*
MARUT S G2 Mxx 1k0	7,8	7,1	6,9	6,5	837	925	142,3	> 100 000	4.0
MARUT S G2 Mxx 1k5	11,8	10,4	9,9	9,4	1 255	1 388	147,7	> 100 000	4.0
MARUT S G2 Mxx 2k0	14,5	12,8	12,3	11,7	1 673	1 851	158,2	> 100 000	4.0
MARUT S G2 Mxx 2k5	18,1	16,1	15,1	14,7	2 092	2 313	157,3	> 100 000	4.0
MARUT S G2 Mxx 3k0	22,6	19,5	18,3	17,5	2 510	2 776	158,6	> 100 000	4.0
MARUT S G2 Mxx 3k5	26,4	23,4	21,7	20,7	2 928	3 239	156,5	> 100 000	4.0
MARUT S G2 Mxx 4k0	30,6	27,1	25,1	23,9	3 346	3 701	154,9	> 100 000	4.0
MARUT S G2 Mxx 5k0	39,6	34,3	32,1	30,6	4 183	4 627	151,2	> 100 000	4.0
MARUT S G2 Mxx 6k0	45,3	42,6	39,5	37,4	5 020	5 552	148,4	> 100 000	4.0
MARUT S G2 Mxx 7k0	53,7	46,2	43,9	41,3	5 856	6 477	156,8	> 100 000	4.0
MARUT S G2 Mxx 8k0	63,7**	54	51,1	47,7	6 693	7 402	155,2	> 100 000	4.0
MARUT S G2 Mxx 9k0	-	63	59,1	54,7	7 529	8 328	152,2	> 100 000	4.0

VARIANTS (chip 5050)	POWER (W) Color temperature (K)					LUMINAIRE OUTPUT FLUX (lm)		LUMINAIRE EFFICIENCY (lm/W)	SERVICE LIFE (hrs.)	WEIGHT
Catalog name	BLUE FREE AMBER U500 < 1.7%	2200K Ra 70 U500 < 7%	2700K Ra 70 U500 < 10.6%	3000K Ra 70 U500 < 14%	4000K Ra 70 U500 < 21%	min	max	Up to	L90B10	kg*
MARUT S G2 Lxx 1k0	7,6	7,6	7,1	6,6	6,4	875	946	147,8	> 100 000	4.0
MARUT S G2 Lxx 1k5	11,3	10,9	10,3	9,5	9,3	1 312	1 419	152,6	> 100 000	4.0
MARUT S G2 Lxx 2k0	14,2	13,8	12,6	12	11,4	1 750	1 892	166,0	> 100 000	4.0
MARUT S G2 Lxx 2k5	17,6	17,2	15,6	14,6	14	2 187	2 365	168,9	> 100 000	4.0
MARUT S G2 Lxx 3k0	21,1	20,7	18,9	17,7	16,9	2 625	2 837	167,9	> 100 000	4.0
MARUT S G2 Lxx 3k5	24,6	24,1	22,3	20,6	19,6	3 062	3 310	168,9	> 100 000	4.0
MARUT S G2 Lxx 4k0	28,2	27,7	25,5	23,6	22,6	3 500	3 783	167,4	> 100 000	4.0
MARUT S G2 Lxx 5k0	35,8	35,1	32,3	29,8	28,2	4 375	4 729	167,7	> 100 000	4.0
MARUT S G2 Lxx 6k0	41,1	40,5	39,4	36,3	34,3	5 249	5 675	165,5	> 100 000	4.0
MARUT S G2 Lxx 7k0	48,4	47,5	43,3	40,9	38,2	6 124	6 621	173,3	> 100 000	4.0
MARUT S G2 Lxx 8k0	56,5	55,5	50,4	46,9	44,3	6 999	7 566	170,8	> 100 000	4.0
MARUT S G2 Lxx 9k0	64,8**	63,7**	57,8	53,2	50,1	7 874	8 512	169,9	> 100 000	4.0

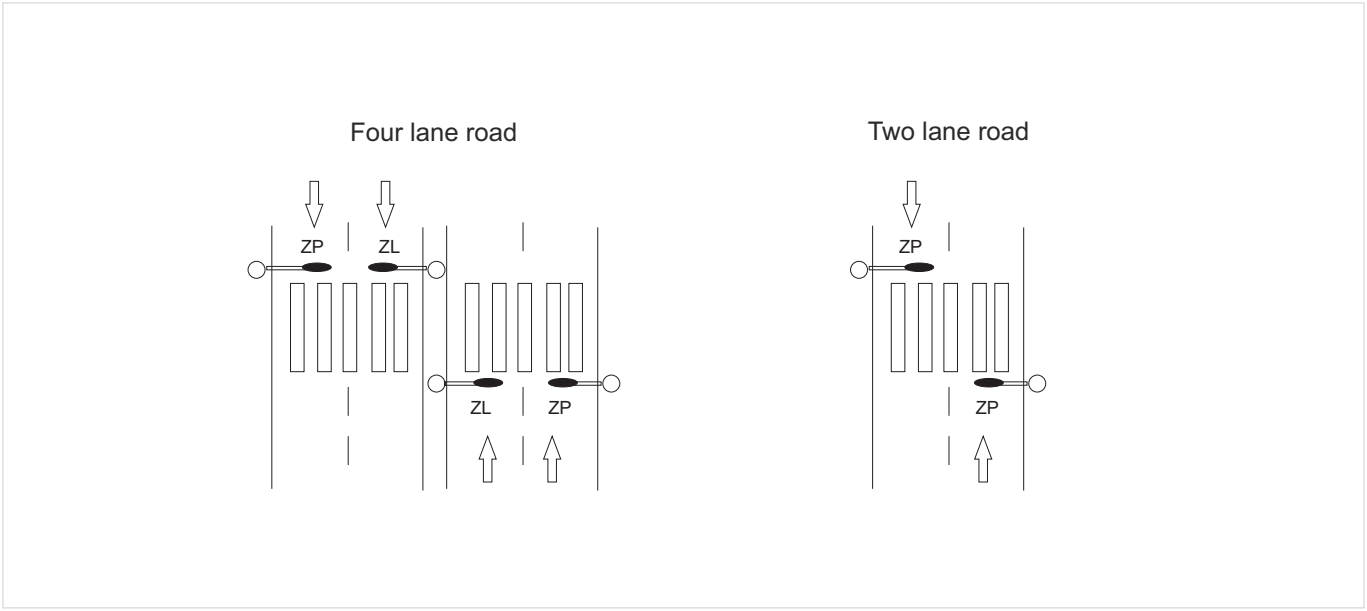
VARIANTS PEDESTRIAN CROSSINGS (chip 3535)	POWER (W) Color temperature (K)					LUMINAIRE OUTPUT FLUX	LUMINAIRE EFFICIENCY (lm/W)	SERVICE LIFE (hrs.)	WEIGHT
Catalog name	2700K Ra 70 U500 < 10.5%	3000K Ra 70 U500 < 15%	4000K Ra 70 U500 < 23%	5000K Ra 70 U500 < 30%	5700K Ra 70 U500 < 30%	lm	Up to	L90B10	kg*
MARUT S G2 Mxx ZL06 5k0	34,3	32,1	30,6	30,1	30,4	4 362	144,9	> 100 000	4.0
MARUT S G2 Mxx ZP06 5k0	34,3	32,1	30,6	30,1	30,4	4 362	144,9	> 100 000	4.0
MARUT S G2 Mxx ZL03 6k0	42,6	39,5	37,4	37,7	37,4	5 360	143,3	> 100 000	4.0
MARUT S G2 Mxx ZL04 6k0	42,6	39,5	37,4	37,7	37,4	5 307	141,9	> 100 000	4.0
MARUT S G2 Mxx ZP01 6k0	42,6	39,5	37,4	37,7	37,4	5 385	144,0	> 100 000	4.0
MARUT S G2 Mxx ZP02 6k0	42,6	39,5	37,4	37,7	37,4	5 387	144,0	> 100 000	4.0
MARUT S G2 Mxx ZP03 6k0	42,6	39,5	37,4	37,7	37,4	5 360	143,3	> 100 000	4.0
MARUT S G2 Mxx ZL06 7k0	-	47,9	44,7	45,1	44,2	6 106	138,1	> 100 000	4.0
MARUT S G2 Mxx ZP06 7k0	-	47,9	44,7	45,1	44,2	6 106	138,1	> 100 000	4.0
MARUT S G2 Mxx ZL03 9k0	-	59,1	54,7	55,2	54,7	8 041	147,0	> 100 000	4.0
MARUT S G2 Mxx ZL04 9k0	-	59,1	54,7	55,2	54,7	7 961	145,5	> 100 000	4.0
MARUT S G2 Mxx ZP01 9k0	-	59,1	54,7	55,2	54,7	8 078	147,7	> 100 000	4.0
MARUT S G2 Mxx ZP02 9k0	-	59,1	54,7	55,2	54,7	8 080	147,7	> 100 000	4.0
MARUT S G2 Mxx ZP03 9k0	-	59,1	54,7	55,2	54,7	8 041	147,0	> 100 000	4.0

* The weight may vary slightly depending on the luminaire variant.

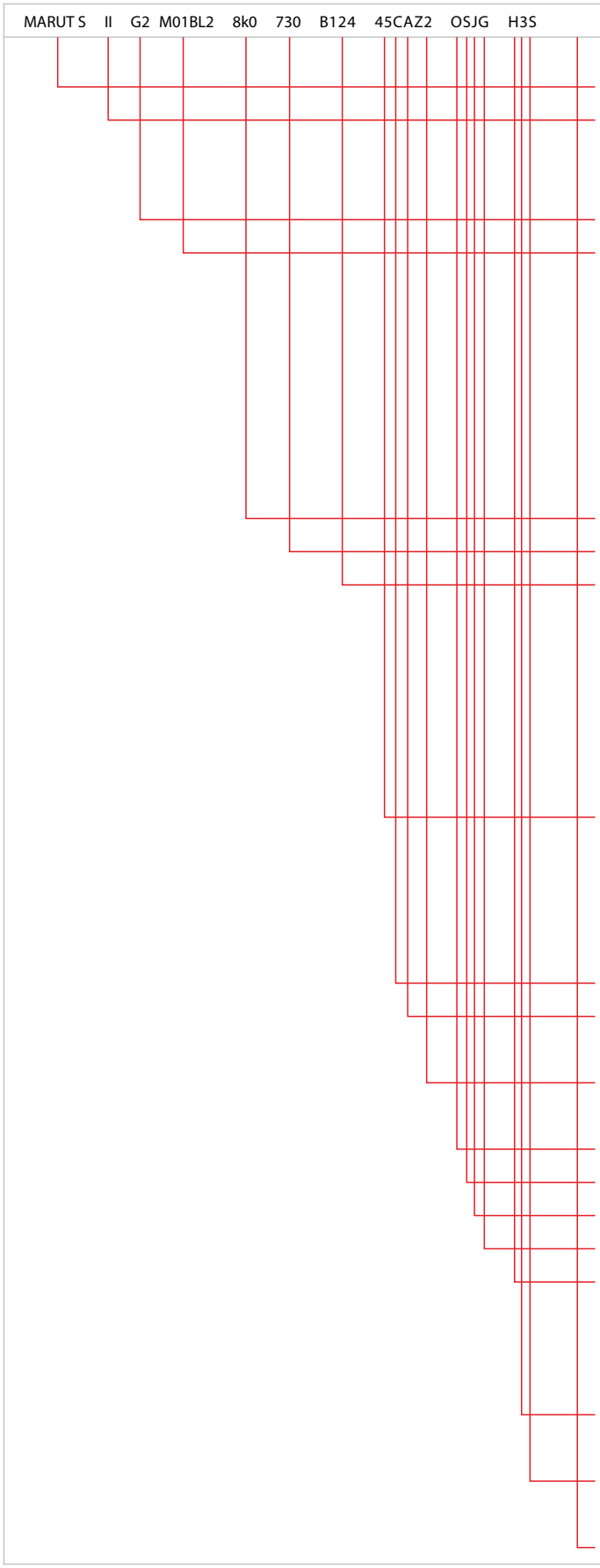
Luminaire ambient temperature TQ 25 °C
Initial color consistency: ≤ 5 SDCM
Optical and electrical parameters tolerance ± 10 %
IDA Dark Sky fixture seal of approval relates to ≤ 3 000 K
To meet IDA requirements, the luminaires must be installed horizontally with the road

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.

The term BLUE FREE (AMBER) in lighting technology refers to light with a minimum amount of the blue part of the light spectrum (< 2%).



CODE DESCRIPTION



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
BL1/BL2	BACK light shades
Luminous flux marking (source)	
Ra 70 / 3 000 K	
LED module marking	
B	LED module type
1	
2	
4	Mask type
Driver type	
43	DALI driver + 3 pole terminal block
45	DALI driver + 5 pole terminal block
45P	DALI driver + 5 pole terminal block + presence detection
4	DALI driver
1	on/off driver
D	D4i driver – (for Zhaga connector)
C	Constant luminous flux (CLO)
A	AstroDim
Z	Zhaga connectror, 4 pin (D4i driver)
Z2	2× Zhaga connectror, 4 pin (D4i driver)
N	NEMA connector, 7 pin (DALI 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)