MARUT M G2

DATASHEET | SPECIFICATIONS

DARKSKY APPROVED
Reduces light pollution
Certified by DarkSky.org

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) » 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 (DALI) » night dimming (A)
	» preparation for wireless communication NEMA (N) » Zhaga (Z)
Constant lumen output	» CLO (C)
LIGHT PARAMETERS	
Optical system	» roads (Mxx) » roads (Lxx) » directional (Pxx)
	» area (Uxx) » 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
Impack protection	» IK 09
EMC	» YES
Vibration 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)

CHARACTERISTIC

Modern outdoor LED luminaire with integrated surge protection and adjustable joint ± 15°.

USE

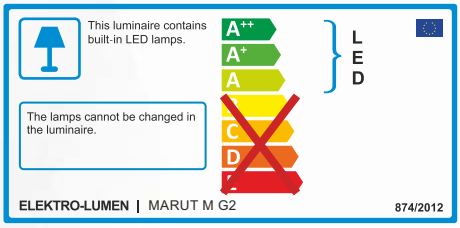
Road classes I., II. and III.

Pedestrian zones | Outdoor areas

Sidewalks | Cycle paths

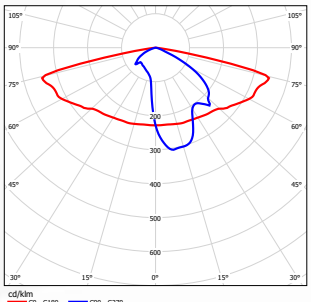
LED | DIMM AD | DALI | IP 66 | IK 09

CB | EMC | Vibration



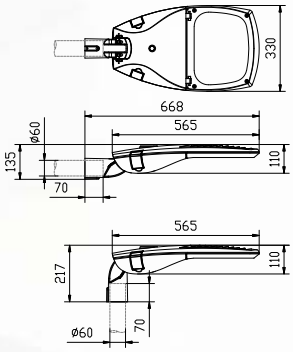
LIGHT DISTRIBUTION CURVE

MARUT M G2 M03 8k0 840



DIMENSIONS

MARUT M G2



VARIANTS

DATASHEET MARUT M G2

VARIANTS (chip 3535)	AMBER modul e (Nxx)			WARM WHITE 722			WARM WHITE 727			WARM WHITE 730			NEUTRAL WHITE 740			Luminaire efficiancy (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 M G2 Mxx 2k0	16,4	1 690	1 870	16	1 740	1 925	13,9	1 640	1 814	13,9	1 740	1 925	12,6	1 683	1 862	148	6,7
MARUT M G2 Mxx 3k0	27,2	2 510	2 777	23,4	2 510	2 777	20,9	2 510	2 777	19,6	2 560	2 832	18,3	2 561	2 833	155	6,7
MARUT M G2 Mxx 4k0	39,8	3 346	3 702	33	3 405	3 767	28,1	3 346	3 702	26,8	3 438	3 804	24,3	3 350	3 706	153	6,7
MARUT M G2 Mxx 5k0	50,9	4 242	4 693	43,4	4 250	4 702	35,5	4 150	4 591	33	4 166	4 609	31	4 200	4 647	150	6,7
MARUT M G2 Mxx 6k0	62	5 020	5 554	44,4	5 036	5 572	45,5	5 112	5 655	41,1	5 003	5 535	38,3	5 049	5 586	146	6,7
MARUT M G2 Mxx 7k0	—	—	—	53,7	5 965	6 600	47	5 865	6 488	42	5 702	6 309	41,2	5 957	6 590	160	6,7
MARUT M G2 Mxx 8k0	—	—	—	63,5	6 802	7 525	54,3	6 693	7 405	49,3	6 576	7 275	47	6 701	7 414	158	6,7
MARUT M G2 Mxx 9k0	—	—	—	72,9	7 521	8 321	63,3	7 764	8 590	59,3	7 747	8 571	54,4	7 638	8 451	155	6,7
MARUT M G2 Mxx 10k0	—	—	—	84,8*	8 508	9 413	69,9	8 299	9 182	64,9	8 333	9 219	61	8 399	9 293	152	6,7
MARUT M G2 Mxx 12k0	—	—	—	—	—	—	84,9*	9 797	10 839	79*	9 551	11 010	74	10 098	11 172	151	6,7

VARIANTS (chip 5050)	AMBER optics (ALxx)			WARM WHITE 722	WARM WHITE 727			WARM WHITE 730			NEUTRAL WHITE 740			Luminaire efficiancy	
MARUT M G2 Lxx 2k0	12,3	1 318	1 536	—	12,5	1 724	1 824	12,5	1 804	1 909	12,5	1 910	2 022	162	6,7
MARUT M G2 Lxx 3k0	17,5	1 907	2 222	—	18	2 612	2 764	17,5	2 612	2 764	17,5	2 763	2 924	167	6,7
MARUT M G2 Lxx 4k0	23,1	2 544	2 966	—	24,5	3 492	3 695	23,1	3 478	3 681	23,1	3 687	3 902	169	6,7
MARUT M G2 Lxx 5k0	28	3 071	3 580	—	31,1	4 411	4 669	30,6	4 549	4 814	28	7 451	4 711	168	6,7
MARUT M G2 Lxx 6k0	34,1	3 666	4 273	—	38	5 331	5 642	35,9	5 242	5 548	34,1	5 313	5 623	165	6,7
MARUT M G2 Lxx 7k0	36,9	4 279	4 988	—	41,3	6 175	6 535	39,6	6 220	6 582	36,9	6 202	6 563	178	6,7
MARUT M G2 Lxx 8k0	44	5 088	5 931	—	46,4	6 984	7 391	46,4	7 321	7 748	44	7 375	7 804	177	6,7
MARUT M G2 Lxx 9k0	48,7	5 622	6 553	—	53,7	8 014	8 482	51,2	8 041	8 510	48,7	8 148	8 623	177	6,7
MARUT M G2 Lxx 10k0	53,5	6 143	7 161	—	59,5	8 823	9 337	58,5	9 098	9 629	53,5	8 903	9 422	176	6,7
MARUT M G2 Lxx 12k0	65,2	7 332	8 547	—	73,6	10 653	11 274	68,7	10 484	11 096	65,2	10 626	11 246	172	6,7

* Can not be produced under ENEC licence	IDA Dark Sky fixture seal of approval relates to ≤ 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 ± 10 %
Initial color consistency: ≤ 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 M II G2 M01 8k0 730 B124 45CAZ SJG 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	Back light 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 connectror, 4 pin (Dexal driver)
N	NEMA connector, 7 pin (4 DIM driver)
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	