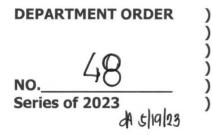


Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY

Manila



SUBJECT: Supplemental Parameters in Table 2 – Roadway Lighting Stationing and Parameters, D.O. No. 19, Series of 2023, Re: Guidelines and Standard Design Drawings for Solar-Powered Roadway Lighting Along National Roads

In order to provide additional reference for a more cost-effective and efficient design of solarpowered roadway lighting suitable for secondary and tertiary roads, supplementary parameters for **6-meter high solar powered roadway lighting poles** are included in the hereto attached revised Table 2 – Roadway Lighting Stationing and Parameters (Annex "A") of D.O. No. 19, Series of 2023, Re: Guidelines and Standard Design Drawings for Solar-Powered Roadway Lighting Along National Roads.

This order shall take effect immediately.

MANUEL M. BONOAN Secretary

5.1 LLL/DLB/RPBG/MLC



05.19.2023

ROAD CLASSIFICATION	LIGHTING ARRANGEMENT	ROAD WIDTH (meter)	POLE PLACING (meter)	MOUNTING HEIGHT (meter)	LAMP WATTAGE (watt)		MAST ARM LENGTH
					HPS	LED	(meter)
PRIMARY	SINGLE	6.7	10-25	10	150-250	80-125	1.5
		13.4	15-35	12	150-250	80-125	3.0
	AXIAL	13.4	20-35	10	150-250	80-125	1.5
		20.1	20-40	12	150-250	80-125	3.0
		26.8	20-45	12	300-400	200-300	3.0
	OPPOSITE	6.7	20-35	10	70-120	50-80	1.5
		13.4	20-35	12	150-250	80-125	1.5
		20.1	20-40	12	300-400	200-300	1.5
		26.8	20-45	12	300-400	200-300	1.5
	STAGGERED	6.7	10-25	8	70-120	50-80	1.5
		13.4	10-25	10	150-250	80-125	1.5
		20.1	15-25	12	300-400	200-300	3
		26.8	15-25	12	300-400	200-300	3
SECONDARY	SINGLE	6.7	15-35	10	150-250	80-125	1.5
		6.7	15-35	6	70-120	50-80	1.5
	OPPOSITE	6.7	20-40	8	150-250	80-125	1.5
	STAGGERED	6.7	15-35	8	150-250	80-125	1.5
		6.7	15-35	6	70-120	50-80	1.5
TERTIARY	SINGLE	5	10-25	8	70-120	50-80	1.5
		6.1	10-25	8	70-120	50-80	1.5
		5	10-25	6	70-120	50-80	1.5
		6.1	10-25	6	70-120	50-80	1.5
	STAGGERED	5	10-25	8	70-120	50-80	1.5
		6.1	10-25	8	70-120	50-80	1.5
		5	10-25	6	70-120	50-80	1.5
		6.1	10-25	6	70-120	50-80	1.5

TABLE 2 – ROADWAY LIGHTING STATIONING AND PARAMETERS (REVISED)

Notes for 6-meter-high solar-powered roadway lighting poles:

- 1. The LED luminaire shall not overhang within the roadway in order to avoid potential collisions with large vehicles. Thus, the mast arm of the pole must be 1.5 meters long with tilt angle of 60 degrees.
- 2. The structural system components to be used shall be identical with the previously approved Department Order for the 8-meter pole calculation considering that the minimum and maximum diameter of the pole be retained. Structural guidelines are based on road elevation and the unique design of roads so as to ensure that solar-powered roadway lighting will not be adversely affected even under extreme operating conditions.