Road/Area Type According to AD USDM	Calculated Area	Page	Luminaire	Luminaire option	Power [W]	Pole height [m]	Distance [m]	DMA Requirement	Calculated Values		
									E, [lux]	E _{min} [lux]	E _{min} /E _{au}
Typical Two-Lane Roundabout	Outgoing road from the Roundabout		Typical Street LED Luminaire	5° tilted, median single	186	14	50	Secondary Arterial (Avenue) $L_{sv} = 1,0 \text{ cd/m}^2 \mid L_{mo}/L_{lov} = 0,4$ $1\text{cd/m}^2 \text{ similar to 15 lux}$	16	6,41	0,40
Typical Two-Lane Roundabout	Road going into the Roundabout		Typical Street LED Luminaire	5° tilted, median single	186	14	50	Secondary Arterial (Avenue) L _{sv} = 1,0 cd/m ² L _{min} / _{Lov} = 0,4 1cd/m ² similar to 15 lux	16	6,39	0,40
Typical Two-Lane Roundabout	Pedestrian Crossing 1		Typical Street LED Luminaire	5° tilted, median single		1		Secondary Arterial (Avenue) $L_{sv} = 1,0 \text{ cd/m}^2 \mid L_{min}/L_{lav} = 0,4$ $1\text{cd/m}^2 \text{ similar to 15 lux}$	32	27	0,84
Typical Two-Lane Roundabout	Vertical Calculations Points on 1m on Pedestrian Crossing 1		Typical Street LED Luminaire	5" tilted, median single				No requirement so far.	Evert _{av} [lux] 15	Evert _{min} [lux] 9,3	0,63
Typical Two-Lane Roundabout	Pedestrian Crossing 2		Typical Street LED Luminaire	5° tilted, median single				Conflict Areas L _{ev} = 2,0 cd/m ² L _{min} /L _{ev} = 0,4 2cd/m ² similar to 30 lux	32	28	0,88
Typical Two-Lane Roundabout	Roundabout Area		Typical Street LED Luminaire	5° tilted, median single				Conflict Areas $L_{av} = 2.0 \text{ cd/m}^2 \mid L_{min}/L_{av} = 0.4$ $2\text{cd/m}^2 \text{ similar to 30 lux}$	31	21	0,68

Table 34

Table of results for a typical two lane roundabout street lighting layout, showing conformity with DMA Lighting Specifications, results provided by DIALux in lx.

3.6.2 Sample of a Street Lighting Calculation for a typical One Lane Roundabout Layout

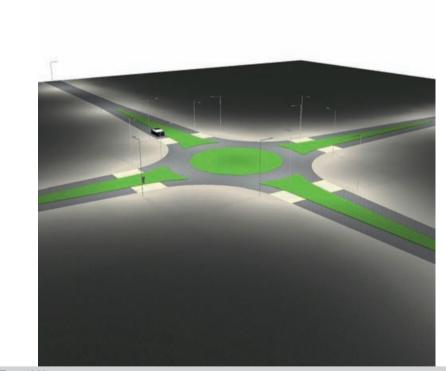


Figure 202 3D Rendering of a typical one lane roundabout street lighting layout.

CHAPTER

G

