



Figure 205  
3D false-colour rendering of a typical street (mini) roundabout street lighting layout, including approximate lux (lx) levels shown by different colours.

LDA Lighting Calculation 05 - Typical Road Lighting in Lux									
Road/Area Type	Calculated Area	Page	Luminaire	Luminaire option	Power	Pole height	Distance	DMA Requirement	Calculated Values
According to AD USDM					[W]	[m]	[m]		$E_{av}$ [lux] $E_{min}$ [lux] $E_{road}/E_{av}$
Mini Roundabout	Typical Road		Typical Street LED Luminaire	not tilted, single sided	102	10	45	Sector Internal Roads (Streets) $L_{av} = 0,6\text{ cd/m}^2$   $L_{min}/L_{av} = 0,4$ $0,6\text{cd/m}^2$ similar to 9 lux	12 4,47 0,37
Mini Roundabout	Pedestrian Crossing		Typical Street LED Luminaire	not tilted, single sided				Conflict Areas $L_{av} = 2,0\text{ cd/m}^2$   $L_{min}/L_{av} = 0,4$ $2\text{cd/m}^2$ similar to 30 lux	30 25 0,83
Mini Roundabout	Vertical Calculations Points on 1m on Pedestrian Crossing		Typical Street LED Luminaire	not tilted, single sided				No requirement so far.	Evert <sub>av</sub> [lux] 20 Evert <sub>min</sub> [lux] 13 0,65
Mini Roundabout	Roundabout Area		Typical Street LED Luminaire	not tilted, single sided				Conflict Areas $L_{av} = 2,0\text{ cd/m}^2$   $L_{min}/L_{av} = 0,4$ $2\text{cd/m}^2$ similar to 30 lux	47 34 0,72

Table 36  
Table of results for a typical street (mini) roundabout street lighting layout, showing conformity with DMA Lighting Specifications, results provided by DIALux in lx.