A 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_{min}/E_{av}
Curvy (Winding) Road V2	Curvy Road Part 1		Typical Street LED Luminaire	not tilted, single sided	102	10	33	Sector Internal Roads (Streets) L_{av} = 0,6 cd/m² | L_{min}/L_{av} = 0,4 0,6cd/m² similar to 9 lux	16	6,32	0,40
Curvy (Winding) Road V2	Straight Road		Typical Street LED Luminaire	not tilted, single sided	102	10	40	Sector Internal Roads (Streets) L_{av} = 0,6 cd/m² | L_{min}/L_{av} = 0,4 0,6cd/m² similar to 9 lux	12	4,6	0,38

Table 33
Table of results for a curvy street lighting layout, showing conformity with DMA Lighting Specifications, results provided by DIALux in lx.

3.4 Lighting Recommendations for Areas adjacent to the Carriageway

People and objects adjacent to the carriageway need to be seen by the driver. Such locations include unmade verges, footways and cycle paths and the emergency lanes of motorways. For all traffic routes other than heavily used footways and cycle tracks and the emergency lanes of motorways, lighting of the area adjacent to the carriageway should conform to the surround ratio of at least 0.5, means 50% of street luminance or illuminance values, if no other carriage way is adjacent with its own given values.

For traffic routes with heavily trafficked footways and cycle tracks an appropriate lighting criterion should be selected. Which criterion is selected will depend on the lighting class used for the carriageway.
To ensure adequate illuminance uniformity, the actual maintained average horizontal illuminance should not be more than 1.5 times greater than the minimum maintained average horizontal illuminance.

Emergency lanes on motorways should be lit to lighting class ME5 (see Table 27).

3.5 Lighting Recommendations for Conflict Areas

A conflict area is one in which traffic flows merge or cross, e.g. at intersections or roundabouts, or where vehicles and other road users are in close proximity, e.g. on a shopping street or at a pedestrian crossing. Lighting for conflict areas is intended for drivers rather than pedestrians. The criteria used to define lighting for conflict areas are based on the illuminance on the road surface rather than road surface luminance. This is because drivers' viewing distances may be less than the 60m assumed for traffic routes and there are likely to be multiple directions of view. The criteria used for the lighting of conflict areas are:

3.5.1 Average Road Surface Illuminance

The illuminance (maintained) of the road surface averaged over the carriageway (lx).