The following chart contains the recommended minimum average maintained illumination and maximum uniformity ratios by facility classification and pavement classification (Source: May 2010 MN/DOT Roadway Lighting Design Manual)

Pavement Classification Notes:

1. R1 = cement/concrete
2. R2 = asphalt/gravel
3. R3 = asphalt/rough texture (typical highway)
4. R4 = asphalt/smooth texture

Roadway and Walkway Classification		R1		R2 or R3		R4		Maximum Uniformity Ratio (avg./min.)
Road	Location	Foot-candles	Lux	Foot-candles	Lux	Foot-candles	Lux	
Interstate and Other Freeways	Commercial	0.6 - 1.1	6 -12	0.6 - 1.1	6 - 12	0.6 - 1.1	6 - 12	3:1 or 4:1
	Intermediate	0.6 - 0.9	6 - 10	0.6 - 0.9	6 - 10	0.6 - 0.9	6 - 10	3:1 or 4:1
	Residential	0.6 - 0.8	6 - 8	0.6 - 0.8	6 - 8	0.6 - 0.8	6 - 8	3:1 or 4:1
Other Principal Arterials	Commercial	1.1	12	1.6	17	1.4	15	3:1
	Intermediate	0.8	9	1.2	13	1	11	3:1
	Residential	0.6	6	0.8	9	0.8	8	3:1
Minor Arterial	Commercial	0.9	10	1.4	15	1	11	4:1
	Intermediate	0.8	8	1	11	0.9	10	4:1
	Residential	0.5	5	0.7	7	0.7	7	4:1
Collectors	Commercial	0.8	8	1.1	12	0.9	10	4:1
	Intermediate	0.6	6	0.8	9	0.8	8	4:1
	Residential	0.4	4	0.6	6	0.5	5	4:1
Local	Commercial	0.6	6	0.8	9	0.8	8	6:1
	Intermediate	0.5	5	0.7	7	0.6	6	6:1
	Residential	0.3	3	0.4	4	0.4	4	6:1
Alleys	Commercial	0.4	4	0.6	6	0.5	5	6:1
	Intermediate	0.3	3	0.4	4	0.4	4	6:1
	Residential	0.2	2	0.3	3	0.3	3	6:1
Sidewalks	Commercial	0.9	10	1.3	14	1.2	13	3:1
	Intermediate	0.6	6	0.8	9	0.8	8	4:1
	Residential	0.3	3	0.4	4	0.4	4	6:1
Pedestrian Ways and Bike Ways		1.4	15	2	22	1.8	19	3:1
Rest Areas	Roadways	-	-	0.6 - 0.8	6 - 9	-	-	3:1 or 4:1
	Parking Areas	-	-	1	11	-	-	3:1 or 4:1