**SLR-45-01/Rev.1**

*(revised SLR-44-13) based on SLR-44-02/Rev1*

# Table 5

**Type approval photometric requirements for driving-beam**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates* *in deg.* | | *Minimum luminous intensity in cd* | | | | | |
| *vertical* | *horizontal* | *Class A* | *Class B* | *Class RA (Auxiliary)* | *Class BS* | *Class CS (Secondary)* | *Class DS (Secondary)* |
| 2U-V | 2°U | 0° | 1.00∙103 | 1.70∙103 | - | - | 1.00∙103 | 1.70∙103 |
| H-12L | 0° | 12°L | 6.00∙102 | 1.50∙103 | - | - | - | - |
| H-9L | 0° | 9°L | 2.00∙103 | 3.40∙103 | - | - | - | - |
| H-6L | 0° | 6°L | 3.40∙103 | 5.00∙103 | - | 2.50∙103 | 3.40∙103 | 5.00∙103 |
| H-3L | 0° | 3°L | 1.20∙104 | 1.75∙104 | - | 9.0∙103 | 1.20∙104 | 1.75∙104 |
| H-V a | 0° | 0° | 0.8×Imax | 0.8×Imax | 0.8×Imax | 1.60∙104 | 2.00∙104 | 3.00∙104 |
| H-3R | 0° | 3°R | 1.20∙104 | 1.75∙104 | - | 9.0∙103 | 1.20∙104 | 1.75∙104 |
| H-6R | 0° | 6°R | 3.40∙103 | 5.00∙103 | - | 2.50∙103 | 3.40∙103 | 5.00∙103 |
| H-9R | 0° | 9°R | 2.00∙103 | 3.40∙103 | - | - | - | - |
| H-12R | 0° | 12°R | 6.00∙102 | 1.50∙103 | - | - | - | - |
| Imax | - | - | 2.70∙104 | 4.00∙104 | 1.00∙104 | 2.00∙104 | 2.70∙104 | 4.00∙104 |

*Notes:* In the Table 5

a In case of a matched pair, the contribution of each lamp on H-V point shall

not be less than 40 per cent of the relevant beam class minimum Imax required.

# Table 6

**Type approval photometric requirements for Classes C and V passing-beam   
(indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Part A | *Element* | *Angular coordinates in deg.* | | *Luminous intensity in cd* | | | |
| *Class C* | | *Class V* | |
| *vertical* | *horizontal* | *min* | *max* | *min* | *max* |
| Zone III | As specified in part C | | - | 6.25∙102 | - | 6.25∙102 |
| S50+S50LL+S50RR | As specified in part B | | 1.90∙102 b | - | - | - |
| S100+S100LL+S100RR | As specified in part B | | 3.75∙102 b | - | - | - |
| BR | 1°U | 2.5°R |  | 1.75∙103 |  | 1.75∙103 |
| Segment BLL | 0.57°U | 8°L to 20°L |  | 6.25∙102 | - | 6.25∙102 |
| B50L | 0.57°U | 3.43°L |  | 3.50∙102 |  | 3.50∙102 |
| P | 0° | 7°L | 6.3∙101 |  | 6.3∙101 |  |
| 75 R | 0.57°D | 1.15°R | 1.21∙104 | - | - | - |
| 50 L | 0.86°D | 3.43°L | 5.00∙103 a | 3.70∙104 | 3.55∙103 a | 3.70∙104 |
| 50 V | 0.86°D | 0° | 5.10∙103 a | - | 5.10∙103 | - |
| 50 R | 0.86°D | 1.72°R | 1.01∙104 | - | 5.10∙103 | - |
| Segment 50 | 0.86°D | 6.84°L to 6.84°R | 2.54∙103 | - | 1.80∙103 | - |
| Segment 40LL | 1.07°D | 14°L to 9°L | 8.50∙102 | - | 6.00∙102 | - |
| 40L | 1.07°D | 9°L | 2.80∙103 | - | 1.95∙103 | - |
| 40R | 1.07°D | 9°R | 2.80∙103 | - | 1.95∙103 | - |
| Segment 40RR | 1.07°D | 9°R to 14°R | 8.50∙102 | - | 6.00∙102 | - |
| 25V | 1.72°D | 0° | 2.50∙103 | - | 1.75∙103 | - |
| Segment 25L | 1.72°D | 16°L to 9°L | 1.18∙103 | - | 8.25∙102 | - |
| Segment 25 | 1.72°D | 9°L to 9°R | 1.70∙103 | - | 1.20∙103 | - |
| Segment 25R | 1.72°D | 9°R to 16°R | 1.18∙103 | - | 8.25∙102 | - |
|  |  |  |  |  |  |  |
| Segment 15 | 2.86°D | 20°L to 20°R | 4.25∙102 | - | 3.00∙102 | - |
| Segment 10 | 4°D | 4.5°L to 2°R | 5.00∙102 |  | 3.50∙102 |  |
| Segment 10 and below | 4°D | 4.5°L to 2°R |  | 0,8 x the actual  measured value at 50R |  | 0,8 x the actual  measured value at 50R |
| Imax | - | - |  |  |  | 4.41∙104 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Part B | Overhead sign requirements, angular position of measurement points | | | | | | |
| *Element* | S50LL | S50 | S50RR | S100LL | S100 | S100RR |
|  | *Angular coordinates in deg.* | | | | | |
| *vertical* | 4°U | 4°U | 4°U | 2°U | 2°U | 2°U |
| *horizontal* | 8°L | 0° | 8°R | 4°L | 0° | 4°R |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Part C | *Zone III (bounded by the following coordinates)*  *Angular coordinates in deg.* | | | | | | | | |
| *vertical* | 1°U | 4°U | 4°U | 2°U | 1.5°U | 1.5°U | 0° | 0° |
| *horizontal* | 8°L | 8°L | 8°R | 8°R | 6°R | 1.5°R | 0° | 4°L |

*Notes:* In the Table 6, Part A, B and C:

a In case of a matched pair the contribution of each lamp shall not be less than 50% of the required minimum value.

b One pair of position lamps, being incorporated with the headlamp or being intended to be installed together with the headlamp may be activated according to the indications of the applicant.

# Table 7

# **Type approval photometric requirements for Classes C, V, E and W passing-beam in conjunction with Figure A4-VI (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Part A | *Element* | *Angular coordinates in deg.* | | *Luminous intensity in cd* | | | | | | | |
| *vertical* | *horizontal* | *Class C* | | *Class V* | | *Class E* | | *Class W* b | |
| *min* | *max* | *min* | *max* | *min* | *max* | *min* | *max* |
| Zone III | As specified in Table 9 | | - | 6.25∙102 | - | 6.25∙102 | - | 8.80∙102 | - | 8.80∙102 |
| S50+S50LL+S50RR | As specified in Table 11 | | 1.90∙102 d | - | - | - | 1.90∙102 d | - | 1.90∙102 d | - |
| S100+S100LL+S100RR | As specified in Table 11 | | 3.75∙103 d | - | - | - | 3.75∙102 d | - | 3.75∙102 d | - |
| BR | 1°U | 2.5°R | - | 1.75∙103 |  | 1.75∙103 | - | 1.75∙103 | - | 2.65∙103 |
| Segment BLL | 0.57°U | 20°L to 8°L | - | 6.25∙102 | - | 6.25∙102 | - | 8.80∙102 | - | 8.80∙102 |
|  |  |  |  |  |  |  |  |  |  |  |
| B50L | 0.57°U | 3.43°L | - | 3.50∙102 | -- | 3.50∙102 | - | 6.25∙102 e | - | 6.25∙102 |
| P | 0° | 7°L | 6.3∙101 | - | 6.3∙101 | - | - | - | - | - |
| 125R | 0.34°D | 1.15°R | - | - | - | - | 1.20∙104 | - | - | - |
| 75R | 0.57°D | 1.15°R | 1.21∙104 | - | - | - | 1.52∙104 | - | 1.52∙104 | - |
| 50L | 0.86°D | 3.43°L | 5.00∙103 f | 3.70∙104 | 3.55∙103 f | 3.70∙104 | 6.80∙103 f | - | 6.80∙103 f | 3.70∙104 |
| 50V | 0.86°D | 0° | 5.10∙103 f | - | 5.10∙103 | - | 1.01∙104 a | - | 1.01∙104 a | - |
| 50R | 0.86°D | 1.72°R | 1.01∙104 | - | 5.10∙103 | - | - | - | - |  |
| Segment 50 | 0.86°D | 6.84°L to 6.84°R | 2.54∙103 | - | 1.80∙103 | - | 2.54∙103 | - | 2.54∙103 | - |
| 40L | 1.07°D | 14°L | 2.80∙103 | - | 1.95∙103 | - | 2.80∙103 | - | 2.80∙103 | - |
| Segment 40LL | 1.07°D | 14°L to 9°L | 8.50∙102 | - | 6.00∙102 | - | 8.50∙102 | - | 8.50∙102 | - |
| 40R | 1.07°D | 9°R | 2.80∙103 | - | 1.95∙103 | - | 2.80∙103 | - | 2.80∙103 | - |
| Segment 40RR | 1.07°D | 9°R to 14°R | 8.50∙102 | - | 6.00∙102 | - | 8.50∙102 | - | 8.50∙102 | - |
| 25V | 1.72°D | 0° | 2.50∙103 | - | 1.75∙103 | - | 2.50∙103 | - | - | - |
| Segment 25L | 1.72°D | 16°L to 9°L | 1.18∙103 | - | 8.25∙102 | - | 1.18∙103 | - | 1.18∙103 | - |
| Segment 25 | 1.72°D | 9°L to 9°R | 1.70∙103 | - | 1.20∙103 | - | 1.70∙103 | - | - | - |
| Segment 25R | 1.72°D | 9°R to 16°R | 1.18∙103 | - | 8.25∙102 | - | 1.18∙103 | - | 1.18∙103 | - |
| Segment 20 and below | 2°D | 3.5°L to 0° | - | - | - | - | - | - | - | 1.76∙104 b |
| Segment 15 | 2.86°D | 20°L to 20°R | 4.25∙102 | - | 3.00∙102 | - | 4.25∙102 | - | - | - |
| Segment 10 | 4°D | 4.5°L to 2°R | 5.00∙102 | - | 3.50∙102 | - | 5.00∙102 | - | - | - |
| Segment 10 and below | 4°D | 4.5°L to 2°R |  | 0.8 x the actual measured value at 50R | - | 0.8 x the actual measured value at 50R | - | 0.8 x the actual measured value at  50R | - | 7.10∙103 |
| Imax c | - | - |  | - | - | 4.41∙104 | - | - | - | - |

Part B (bending mode): Table 7 applies, however the requirements for point B50L, Zone III and point 50L are indicated hereunder:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Part B* | *Element* | *Angular coordinates in deg.* | | *Luminous intensity in cd* | | | | | | | |
| *vertical* | *horizontal* | *Class C* | | *Class V* | | *Class E* | | *Class W*2 | |
| *min* | *max* | *min* | *max* | *min* | *max* | *min* | *max* |
| Zone III | As specified in Table 9 | | - | 8.80∙102 | - | 8.80∙102 | - | 8.80∙102 | - | 8.80∙102 |
| B50L | 0.57°U | 3.43°L | - | 5.30∙102 | - | 5.30∙102 | - | - | - | 7.90∙102 |
| 50L | 0.86°D | 3.43°L | 1.70∙103 | - | 1.70∙103 | - | 3.40∙103 | - | 3.40∙103 | - |

*Notes:* In the Table 7, Part A and B:

a The contribution of each side of the system shall not be less than 2.50∙103 cd.

b Requirements according to the provisions indicated in Table 10 apply in addition.

c Position requirements according to the provisions of Table 8 ("Segment Imax").

d One pair of position lamps, being incorporated with the system or being intended to be installed together with the system may be activated according to the indications of the applicant.

e Requirements according to the provisions indicated in Table 12 apply in addition.

f The contribution of each side of the system shall not be less than 50% of the required minimum value.

# Table 8

# **Passing-beam elements angular position/extend, additional requirements (indicated for right-hand traffic)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Beam part designation and requirement* | *“Reference” Class C passing-beam (neutral state)*  *Angular coordinates in deg.* | |
| *vertical* | *horizontal* |
| A | Angular position / extend for segment Imax  The maximum luminous intensity in "Segment Imax" as indicated in this Table shall be within the limits as prescribed in “Imax” in Table 7. | 0.3°D  to  1.72°D | 0.5°L  to  3°R |
| B | The "cut-off" and part(s) of shall:  (a) comply with the requirements of paragraph 1. of Annex 5 and | | |
| (b) be positioned with its "flat horizontal part" at | 0.57°D | - |

# Table 9

# **Passing-beam zones III, defining corner points (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates in deg.* | | | | | | | | |
| *Corner point No.* | *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* |
| Zone III a  for Class C or Class V Passing-beam | *vertical* | 1°U | 4°U | 4°U | 2°U | 1.5°U | 1.5°U | 0° | 0° |
| *horizontal* | 8°L | 8°L | 8°R | 8°R | 6°R | 1.5°R | 0° | 4°L |
| Zone III b  for Class W or Class E Passing-beam | *vertical* | 1°U | 4°U | 4°U | 2°U | 1.5°U | 1.5°U | 0.34°U | 0.34°U |
| *horizontal* | 8°L | 8°L | 8°R | 8°R | 6°R | 1.5°R | 0.5°L | 4°L |

# Table 10

# **Additional provisions for Class W passing-beam (indicated for right-hand traffic)**

|  |  |  |  |
| --- | --- | --- | --- |
| *Element* | *Angular coordinates in deg.* | | *Max. luminous intensity in cd* |
| *vertical* | *horizontal* |
| E | 10°U | 20°L to 20°R | 1.75∙102 |
| F1 | 10°U to 60°U | 10°L |
| F2 | 0° |
| F3 | 10°R |

# Table 11

# **Overhead sign requirements, angular position of measurement points (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Element* | S50LL | S50 | S50RR | S100LL | S100 | S100RR |
|  | *Angular coordinates in deg.* | | | | | |
| *vertical* | 4°U | 4°U | 4°U | 2°U | 2°U | 2°U |
| *horizontal* | 8°L | 0° | 8°R | 4°L | 0° | 4°R |

# Table 12

# **Additional provisions for Class E passing-beam (indicated for right-hand traffic)**

Part A of Table7 applies, however the requirement for point B50L is replaced as indicated hereunder:

|  |  |  |  |
| --- | --- | --- | --- |
| *Data Set* | *Angular coordinates in deg.* | | *Max. luminous intensity in cd* |
| *vertical* | *horizontal* |
| E1 | 0.57°U | 3.43°L | 5.30∙102 |
| E2 | 4.40∙102 |
| E3 | 3.50∙102 |

# Table 13

# **Type approval photometric requirements concerning the adaptation of the driving-beam**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Part A* | *Element* | *Angular coordinates in deg.* | | *Max. luminous intensity b in cd* |
| *vertical* | *horizontal* |
| Line 1 Left  Oncoming vehicle at 50 m in the case of right-hand traffic | 0.57°U | 4.8°L to 2°L | 6.25∙102 |
| Line 1 Right  Oncoming vehicle at 50 m in the case of left-hand traffic | 0.57°U | 2°R to 4.8°R | 6.25∙102 |
| Line 2 Left  Oncoming vehicle at 100 m in the case of right-hand traffic | 0.3°U | 2.4°L to 1°L | 1.75∙103 |
| Line 2 Right  Oncoming vehicle at 100 m in the case of left-hand traffic | 0.3°U | 1°R to 2.4°R | 1.75∙103 |
| Line 3 Left  Oncoming vehicle at 200 m in the case of right-hand traffic | 0.15°U | 1.2°L to 0.5°L | 5.45∙103 |
| Line 3 Right  Oncoming vehicle at 200 m in the case of left-hand traffic | 0.15°U | 0.5°R to 1.2°R | 5.45∙103 |
| Line 4  Preceding vehicle at 50 m in the case of right-hand traffic | 0.3°U | 1.7°L to 1°R | 1.85∙103 |
| > 1°R to 1.7°R | 2.50∙103 |
| Line 4  Preceding vehicle at 50 m in the case of left-hand traffic | 1.7°R to 1°L | 1.85∙103 |
| > 1°L to 1.7°L | 2.50∙103 |
| Line 5  Preceding vehicle at 100 m in the case of right-hand traffic | 0.15°U | 0.9°L to 0.5°R | 5.30∙103 |
| > 0.5°R to 0.9°R | 7.00∙103 |
| Line 5  Preceding vehicle at 100 m in the case of left-hand traffic | 0.9°R to 0.5°L | 5.30∙103 |
| > 0.5°L to 0.9°L | 7.00∙103 |
| Line 6  Preceding vehicle at 200 m in the case of left-hand traffic and right-hand traffic | 0.1°U | 0.45°L to 0.45°R | 1.60∙104 |

| *Part B* | *Element a* | *Angular coordinates in deg.* | | *Min. luminous intensity b in cd* |
| --- | --- | --- | --- | --- |
| *vertical* | *horizontal* |
| 50L | 0.86°D | 3.43°L | 2.55∙103 |
| 50V | 0.86°D | 0° | 5.10∙103 |
| 50R | 0.86°D | 1.72°R | 5.10∙103 |
| 25LL | 1.72°D | 16°L | 1.18∙103 |
| 25RR | 1.72°D | 11°R | 1.18∙103 |

*Notes:* In the Table 13, Part A and B

a Angular positions are indicated for right-hand traffic.

b The photometric requirements for each single measuring point or line (angular position) of this lighting function apply to half of the sum of the respective measured values from all lighting units of the system applied for this function. In case of class ADB for vehicle of category L3, not being part of a matched pair, this provision does not apply.

# Table 14

**Type approval photometric requirements for Class AS passing-beam**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates in deg. a* | | *Luminous intensity in cd* | |
| *vertical* | *horizontal* | *min* | *max* |
| Any point in Zone 1 | 0° to 15°U | 5°L to 5°R |  | 3.20∙102 |
| Any point on line 25L to 25R | 1.72°D | 5°L to 5°R | 1.10∙103 b |  |
| Any point on line 12.5L to 12.5R | 3.43°D | 5°L to 5°R | 5.50∙102 |  |

*Notes:* In the Table 14

a 0.25° tolerance allowed independently at each test point for photometry unless indicated otherwise.

b In case of a matched pair the contribution of each lamp shall not be less than 50% of the required minimum value on 25V (1.72°D- V)

# Table 15

# **Type approval photometric requirements for Class BS passing-beam**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates in deg. a* | | *Luminous intensity in cd* | |
| *vertical* | *horizontal* | *min* | *max* |
| Any point in Zone 1 | 0°to 15°U | 5°L to 5°R |  | 7.00∙102 |
| Any point on line 50L to 50R except 50V | 0.86°D | 2.5°L to 2.5°R | 1.10∙103 |  |
| Point 50V | 0.86°D | 0° | 2.20∙103 b |  |
| Any point on line 25L to 25R | 1.72°D | 5°L to 5°R | 2.20∙103 |  |
| Any point in Zone 2 | 0.86°D to 1.72°D | 5°L to 5°R | 1.10∙103 |  |

*Notes:* In the Table 15

a 0.25° tolerance allowed independently at each test point for photometry unless indicated otherwise.

b In case of a matched pair the contribution of each lamp shall not be less than 50% of the required minimum value for this test point.

# Table 16

**Type approval photometric requirements for Class CS and Class DS passing-beam**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates in deg.* a | | *Luminous intensity in cd* | | |
|
| *vertical* | *horizontal* | *min* | | *max* |
| *Class CS* | *Class DS* | *Classes CS, DS* |
| Zone 2 | > 4°U to 15°U | 8°L to 8°R | -- | -- | 7.00∙102 |
| Zone 1 | 1°U/8°L-4°U/8°L-4°U/8°R-1°U/8°R-0°/4°R-0°/1°R-0.6°U/0°-0°/1°L-0°/4°L-1°U/8°L | | -- | -- | 9.00∙102 |
| P8 | 4°U | 8°L | ∑ 8 + 9 + 10 ≧ 1.50∙102 b | | 7.00∙102 |
| P9 | 4°U | 0° | 7.00∙102 |
| P10 | 4°U | 8°R | 7.00∙102 |
| P11 | 2°U | 4°L | ∑ 11 + 12 + 13 ≧ 3.00∙102 b | | 9.00∙102 |
| P12 | 2°U | 0° | 9.00∙102 |
| P13 | 2°U | 4°R | 9.00∙102 |
| P14L | 0° | 8°L | 5.0∙101 b | 5.0∙101 b | - |
| P15L | 0° | 4°L | 1.00∙102 b | 1.00∙102 b | 9.00∙102 |
| P7 | 0° | 0° | -- | -- | 1.70∙103 |
| P15R | 0° | 4°R | 1.00∙102 b | 1.00∙102 b | 9.00∙102 |
| P14R | 0° | 8°R | 5.0∙101 b | 5.0∙101 b | - |
| P3 | 0.86°D | 3.5°L |  |  | 1.38∙104 |
| P2 | 0.86°D | 0° | 2.45∙103 c | 4.90∙103 c | - |
| P1 | 0.86°D | 3.5°R |  |  | 1.38∙104 |
| Segment 123 | 0.86°D | 3.5°R to 3.5°L | 2.00∙103 | 2.00∙103 | - |
| Segment 4LL | 1.07°D | 9°L to 3.5°L | 4.25∙102 | 8.50∙102 | - |
| Segment 4RR | 1.07°D | 3.5°R to 9°R | 4.25∙102 | 8.50∙102 | - |
| Segment 5 | 2°D | 15°L to 15°R | 5.50∙102 | 1.10∙103 | -- |
| Segment 6 | 4°D | 20°L to 20°R | 1.50∙102 | 3.00∙102 | 0.8 x the actual measured value at point 2 |

*Notes:* In the Table 16

a 0.25° tolerance allowed independently at each test point for photometry unless indicated otherwise.

b

The position lamp(s), being incorporated with the headlamp or being intended to be installed together with the headlamp may be activated according to the indications of the applicant.

c In case of a matched pair the contribution of each lamp shall not be less than 50% of the required minimum value.

# Table 17

# **Type approval photometric requirements for front fog lamp**

| *Element* | *Angular coordinates in deg.* | | *Luminous intensity*  *in cd* | | *To comply* |
| --- | --- | --- | --- | --- | --- |
| *vertical* | *horizontal* | *min* | *max* |
| P1 and P2 | 60°U | 45°L and 45°R | - | 8.5∙101 | All points |
| P3 and P4 | 40°U | 30°L and 30°R |
| P5 and P6 | 30°U | 60°L and 60°R |
| P7 and P10 | 20°U | 40°L and 40°R |
| P8 and P9 | 20°U | 15°L and 15°R |
| Line 1 | 8°U | 26°L to 26°R | - | 1.30∙102 | All line |
| Line 2 | 4°U | 26°L to 26°R | - | 1.50∙102 | All line |
| Line 3 | 2°U | 26°L to 26°R | - | 2.45∙102 | All line |
| Line 4 | 1°U | 26°L to 26°R | - | 3.60∙102 | All line |
| Line 5 | 0° | 10°L to 10°R | - | 4.85∙102 | All line |
| Line 6 a | 2.5°D | from 5° inwards  to 10° outward | 2.70∙103 | - | All line |
| Line 7 a | 6°D | from 5° inwards  to 10° outward | - | 0.5 x the actual measured max. value on Line 6 | All line |
| Line 8L and 8R | 1.5°D to 3.5°D | 22°L and 22°R | 1.10∙103 | - | One or more points |
| Line 9L and 9R | 1.5°D to 4.5°D | 35°L and 35°R | 4.50∙102 | - | One or more points |
| Zone D | 1.5°D to 3.5°D | 10°L to 10°R | - | 1.20∙104 | Whole zone |

*Notes:* In the Table 17

a In case of lamps constituting a matched pair, the half of the sum of the respective measured values from both lamps together does not apply to this element (see paragraph 1.5. of Annex 4)

# Table 18

**Type approval photometric requirements for cornering lamp (left side lamp)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates in deg.* | | *Luminous intensity in cd* | |
| *vertical* | *horizontal* | *min* | *max* |
| Zone 1 | Above 1°U | 90°L to 90°R | - | 3.00∙102 |
| Zone 2 | 0° to 1°U | 90°L to 90°R | - | 6.00∙102 |
| Zone 3 | Below 0° | 90°L to 90°R | - | 1.40∙104 |
| P1 | 2.5°D | 30°L | 3.75∙102 | - |
| P2 | 2.5°D | 45°L | 6.25∙102 | - |
| P3 | 2.5°D | 60°L | 3.75∙102 | - |

# Table 19

**Conformity of production, photometric requirements for front fog lamp**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates in deg.* | | *Luminous intensity in cd* | | | | *To comply* |
| *Equivalent 20 per cent* | | *Equivalent 30 per cent* | |
| *vertical* | *horizontal* | *min* | *max* | *min* | *max* |
| P1 and P2 | 60°U | 45°L and 45°R | - | 1.15∙102 | - | 1.30∙102 | All points |
| P3 and P4 | 40°U | 30°L and 30°R |
| P5 and P6 | 30°U | 60°L and 60°R |
| P7 and P10 | 20°U | 40°L and 40°R |
| P8 and P9 | 20°U | 15°L and 15°R |
| Line 1 | 8°U | 26°L to 26°R | - | 1.60∙102 | - | 1.70∙102 | All line |
| Line 2 | 4°U | 26°L to 26°R | - | 1.80∙102 | - | 1.95∙102 | All line |
| Line 3 | 2°U | 26°L to 26°R | - | 2.95∙102 | - | 3.20∙102 | All line |
| Line 4 | 1°U | 26°L to 26°R | - | 4.35∙102 | - | 4.70∙102 | All line |
| Line 5 | 0° | 10°L to 10°R | - | 5.85∙102 | - | 6.30∙102 | All line |
| Line 6 a | 2.5°D | from 5° inwards  to 10° outward | 2.16∙103 | - | 1.89∙103 | - | All line |
| Line 8L  and 8R | 1.5°D to 3.5°D | 22°L and 22°R | 8.80∙102 | - | 7.70∙102 | - | One or more points |
| Line 9L  and 9 R | 1.5°D to 4.5°D | 35°L and 35°R | 3.60∙102 | - | 3.15∙102 | - | One or more points |
| Zone D | 1.5°D to 3.5°D | 10°L to 10°R | - | 1.44∙104 | - | 1.56∙104 | Whole zone |

*Notes:* In the Table 19

a In case of lamps constituting a matched pair, the half of the sum of the respective measured values from both lamps together does not apply to this element (see paragraph 1.5. of Annex 4)

# Table 21

# **Class C – Neutral State (*non-bending mode)* – System Requirements (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| S50+S50LL+ S50RR | As specified in Table 11 | | 1.90∙102 a | - | 9.5∙101 a | - | 4.5∙101 a | - |
| S100+S100LL+S100RR | As specified in Table 11 | | 3.75∙102 a | - | 1.85∙102 a | - | 9.0∙101 a | - |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| B50L | 0.57°U | 3.43°L | - | 3.50∙102 | - | 5.20∙102 | - | 6.05∙102 |
| Line III | 0° | 4°L to 0° | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| 75R | 0.57°D | 1.15°R | 1.21∙104 | - | 9.68∙103 | - | 8.47∙103 | - |
| 50L | 0.86°D | 3.43°L | 5.00∙103 | 3.70∙104 | 4.00∙103 | 4.44∙104 | 3.50∙103 | 4.81∙104 |
| 50V | 0.86°D | 0° | 5.10∙103 | - | 4.08∙103 | - | 3.57∙103 | - |
| 50R | 0.86°D | 1.72°R | 1.01∙104 | - | 8.08∙103 | - | 7.07∙103 | - |
| 25LL | 1.72°D | 16°L | 1.18∙103 | - | 9.44∙102 | - | 8.26∙102 | - |
| 25RR | 1.72°D | 11°R | 1.18∙103 | - | 9.44∙102 | - | 8.26∙102 | - |
| Segment 10 | 4°D | 4.5°L to 2°R |  | 0,8 x the actual measured value at 50R |  | 0,8 x the actual measured value at 50R |  | 0,8 x the actual measured value at 50R |

*Notes:* In the Table 21:

a One pair of position lamps, being incorporated with the system or being intended to be installed together with the system may be activated according to the indications of the applicant.

# Table 22

# **Class C – Bend lighting – Category 1 – System Requirements (indicated for right-hand traffic)**

| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Column A* | | *Column B* | | *Column C* | |
| *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *vertical* | *horizontal* | *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| B50L | 0.57°U | 3.43°L | - | 5.30∙102 | - | 7.00∙102 | - | 7.85∙102 |
| Line III | 0° | 4°L to 0° | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 75R | 0.57°D | 1.15°R | 1.21∙104 | - | 9.68∙103 | - | 1.21∙104 | - |
| 50L | 0.86°D | 3.43°L | 1.70∙103 | - | 1.36∙103 | - | 1.19∙103 | - |
| 50V | 0.86°D | 0° | 5.10∙103 | - | 4.08∙103 | - | 5.10∙103 | - |
| 50R | 0.86°D | 1.72°R | 1.01∙104 | - | 8.08∙103 | - | 7.07∙103 | - |

# Table 23

# **Class C – Bend lighting – Category 2 – System Requirements (indicated for right-hand traffic)**

| *Element* | *Angular coordinates*  *in deg* | | *Luminous intensity in cd* | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Column A* | | *Column B* | | *Column C* | |
| *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *vertical* | *horizontal* | *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Line BLL | 0.57° U | 20°L to 8°L | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| B50L | 0.57° U | 3.43°L | - | 5.30∙102 | - | 7.00∙102 | - | 7.85∙102 |
| Line III | 0° | 4° L to 0° | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |

# Table 24

# **Class V – non-bending mode – System Requirements (indicated for right-hand traffic)**

| *Element* | *Angular coordinates*  *in deg* | | *Luminous intensity in cd* | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Column A* | | *Column B* | | *Column C* | |
| *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *vertical* | *horizontal* | *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| B50L | 0.57°U | 3.43°L | - | 3.50∙102 | - | 5.20∙102 | - | 6.05∙102 |
| Line III | 0° | 4°L to 0° | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| 50L | 0.86°D | 3.43°L | 3.55∙103 | 3.70∙104 | 2.84∙103 | 4.44∙104 | 2.49∙103 | 4.81∙104 |
| 50R | 0.86°D | 1.72°R | 5.10∙103 | 4.41∙104 | 4.08∙103 | 5.29∙104 | 3.57∙103 | 5.73∙104 |

# Table 25

# **Class V – Bend lighting – Category 1 – System Requirements (indicated for right-hand traffic)**

| *Element* | *Angular coordinates*  *in deg* | | *Luminous intensity in cd* | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Column A* | | *Column B* | | *Column C* | |
| *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *vertical* | *horizontal* | *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 5.30∙102 | - | 7.00∙102 | - | 7.85∙102 |
| Line III | 0° | 4°L to 0° | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 50L | 0.86°D | 3.43°L | 1.70∙103 | - | 1.36∙103 | - | 1.19∙103 | - |
| 50R | 0.86°D | 1.72°R | 5.10∙103 | 4.41∙104 | 4.08∙103 | 5.29∙104 | 3.57∙103 | 5.73∙104 |

# Table 26

# **Class V – Bend lighting – Category 2 – System Requirements (indicated for right-hand traffic)**

| *Element* | *Angular coordinates*  *in deg* | | *Luminous intensity in cd* | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Column A* | | *Column B* | | *Column C* | |
| *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *vertical* | *horizontal* | *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Line BLL | 0.57° U | 20°L to 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57° U | 3.43°L | - | 5.30∙102 | - | 7.00∙102 | - | 7.85∙102 |
| Line III | 0° | 4° L to 0° | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |

# Table 27

**Class W – Non-bending mode – System Requirements (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 2.65∙103 | - | 3.18∙103 | - | 3.45∙103 |
| Point BLL | 0.57°U | 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| Line III b | 0.34°U | 4°L to 0.5°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 75R | 0.57°D | 1.15°R | 1.52∙104 | - | 1.22∙104 | - | 1.06∙104 | - |
| 50L | 0.86°D | 3.43°L | 6.80∙103 | 3.70∙104 | 5.44∙103 | 4.44∙104 | 4.76∙103 | 4.81∙104 |
| 25LL | 1.72°D | 16°L | 1.18∙103 | - | 9.44∙102 | - | 8.26∙102 | - |
| 25RR | 1.72°D | 11°R | 1.18∙103 | - | 9.44∙102 | - | 8.26∙102 | - |
| Segment 20 | 2°D | 3.5°L to 0° | - | 1.76∙104 | - | 2.11∙104 | - | 2.29∙104 |
| Segment 10 | 4°D | 4.5°L to 2°R | - | 7.10∙103 | - | 8.52∙103 | - | 9.23∙103 |

# Table 28

**Class W – Bend lighting – Category 1 – System Requirements (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 7.90∙102 | - | 9.60∙102 | - | 1.05∙103 |
| Point BLL | 0.57°U | 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 7.90∙102 | - | 9.60∙102 | - | 1.05∙103 |
| Line III b | 0.34°U | 4°L to 0.5°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 75R | 0.57°D | 1.15°R | 1.52∙104 | - | 1.22∙104 | - | 1.06∙104 | - |
| 50L | 0.86°D | 3.43°L | 3.40∙103 | - | 2.72∙103 | - | 2.38∙103 | - |

# Table 29

# **Class W – Bend lighting – Category 2 – System Requirements (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 7.90∙102 | - | 9.60∙102 | - | 1.05∙103 |
| Line BLL | 0.57°U | 20°L to 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 7.90∙102 | - | 9.60∙102 | - | 1.05∙103 |
| Line III b | 0.34°U | 4°L to 0.5°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |

# Table 30

# **Class E – Non-bending mode (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 6.25∙102 | - | 8.80∙102 | - | 1.01∙103 |
| Line III b | 0.34°U | 4°L to 0.5°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 75R | 0.57°D | 1.15°R | 1.52∙104 | - | 1.22∙104 | - | 1.06∙104 | - |
| 50L | 0.86°D | 3.43°L | 6.80∙103 | - | 5.44∙103 | - | 4.76∙103 | - |
| 50V | 0.86°D | 0° | 1.01∙104 | - | 8.08∙103 | - | 7.07∙103 | - |

# Table 31

# **Class E1 – Non-bending mode (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 5.30∙102 | - | 7.00∙102 | - | 7.85∙102 |
| Line III b | 0.34°U | 4°L to 0.5°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 75R | 0.57°D | 1.15°R | 1.52∙104 | - | 1.22∙104 | - | 1.06∙104 | - |
| 50L | 0.86°D | 3.43°L | 6.80∙103 | - | 5.44∙103 | - | 4.76∙103 | - |
| 50V | 0.86°D | 0° | 1.01∙104 | - | 8.08∙103 | - | 7.07∙103 | - |

# Table 32

# **Class E2 – Non-bending mode (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 4.40∙102 | -- | 6.10∙102 | - | 6.95∙102 |
| Line III b | 0.34°U | 4°L to 0.5°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 75R | 0.57°D | 1.15°R | 1.52∙104 | - | 1.22∙104 | - | 1.06∙104 | - |
| 50L | 0.86°D | 3.43°L | 6.80∙103 | - | 5.44∙103 | - | 4.76∙103 | - |
| 50V | 0.86°D | 0° | 1.01∙104 | - | 8.08∙103 | - | 7.07∙103 | - |

# Table 33

# **Class E3 – Non-bending mode (indicated for right-hand traffic)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| BR | 1°U | 2.5°R | - | 1.75∙103 | - | 2.10∙103 | - | 2.28∙103 |
| Point BLL | 0.57°U | 8°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| B50L | 0.57°U | 3.43°L | - | 3.50∙102 | - | 5.20∙102 | - | 6.05∙102 |
| Line III b | 0.34°U | 4°L to 0.5°L | - | 8.80∙102 | - | 1.14∙103 | - | 1.26∙103 |
| 75R | 0.57°D | 1.15°R | 1.52∙104 | - | 1.22∙104 | - | 1.06∙104 | - |
| 50L | 0.86°D | 3.43°L | 6.80∙103 | - | 5.44∙103 | - | 4.76∙103 | - |
| 50V | 0.86°D | 0° | 1.01∙104 | - | 8.08∙103 | - | 7.07∙103 | - |

# Table 34

# **Class R – Driving – Neutral State – System Requirements**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| 2U-V | 2°U | 0° | 1.70∙103 | 2.15∙105 | 1.30∙103 | 2.58∙105 | 1.10∙103 | 2.80∙105 |
| H-12L | 0° | 12°L | 1.50∙103 | 1.20∙103 | 1.00∙103 |
| H-9L | 0° | 9°L | 3.40∙103 | 2.70∙103 | 2.30∙103 |
| H-6L | 0° | 6°L | 5.00∙103 | 4.00∙103 | 3.50∙103 |
| H-3L | 0° | 3°L | 1.75∙104 | 1.40∙104 | 1.22∙104 |
| H-V | 0° | 0° | 3.20∙104 | 2.56∙104 | 2.24∙104 |
| H-3R | 0° | 3°R | 1.75∙104 | 1.40∙104 | 1.22∙104 |
| H-6R | 0° | 6°R | 5.00∙103 | 4.00∙103 | 3.50∙103 |
| H-9R | 0° | 9°R | 3.40∙103 | 2.70∙103 | 2.30∙103 |
| H-12R | 0° | 12°R | 1.50∙103 | 1.20∙103 | 1.00∙103 |

# Table 35

# **Class R – Driving-beam Bend lighting – System Requirements**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Element* | *Angular coordinates*  *in deg.* | | *Luminous intensity in cd* | | | | | |
| *Column A* | | *Column B* | | *Column C* | |
| *vertical* | *horizontal* | *≙ 0% CoP* | | *≙ 20% CoP* | | *≙ 30% CoP* | |
| *min* | *max* | *min* | *max* | *min* | *max* |
| 2U-V | 2°U | 0° | 1.30∙103 | 2.15∙105 | 1.08∙103 | 2.58∙105 | 9.50∙102 | 2.80∙105 |
| H-12L | 0° | 12°L | 1.20∙103 | 9.60∙102 | 8.40∙102 |
| H-9L | 0° | 9°L | 2.70∙103 | 2.17∙103 | 1.90∙103 |
| H-6L | 0° | 6°L | 4.00∙103 | 3.20∙103 | 2.80∙103 |
| H-3L | 0° | 3°L | 1.40∙104 | 1.12∙104 | 9.80∙103 |
| H-V | 0° | 0° | 3.20∙104 | 2.56∙104 | 2.24∙104 |
| H-3R | 0° | 3°R | 1.40∙104 | 1.12∙104 | 9.80∙103 |
| H-6R | 0° | 6°R | 4.00∙103 | 3.20∙103 | 2.80∙103 |
| H-9R | 0° | 9°R | 2.70∙103 | 2.17∙103 | 1.90∙103 |
| H-12R | 0° | 12°R | 1.20∙103 | 9.60∙102 | 8.40∙102 |

# Table 36

# **Class R – Adaptive Driving-beam – System Requirements**

| Part A | *Element* | *Angular coordinates in deg* | | *Max. luminous intensity b in cd* | | |
| --- | --- | --- | --- | --- | --- | --- |
| *Column A* | *Column B* | *Column C* |
| *vertical* | *horizontal* | *≙ 0% CoP* | *≙ 20% CoP* | *≙ 30% CoP* |
| Line 1 Left  Oncoming vehicle at 50 m in the case of Right-Hand Traffic | 0.57°U | 4.8°L to 2°L | 6.25∙102 | 8.80∙102 | 1.00∙103 |
| Line 1 Right  Oncoming vehicle at 50 m in the case of Left-Hand Traffic | 0.57°U | 2°R to 4.8°R | 6.25∙102 | 8.80∙102 | 1.00∙103 |
| Line 2 Left  Oncoming vehicle at 100 m in the case of Right-Hand Traffic | 0.3°U | 2.4°L to 1°L | 1.75∙103 | 2.10∙103 | 2.28∙103 |
| Line 2 Right  Oncoming vehicle at 100 m in the case of Left-Hand Traffic | 0.3°U | 1°R to 2.4°R | 1.75∙103 | 2.10∙103 | 2.28∙103 |
| Line 3 Left  Oncoming vehicle at 200 m in the case of Right-Hand Traffic | 0.15°U | 1.2°L to 0.5°L | 5.45∙103 | 6.54∙103 | 7.09∙103 |
| Line 3 Right  Oncoming vehicle at 200 m in the case of Left-Hand Traffic | 0.15°U | 0.5°R to 1.2°R | 5.45∙103 | 6.54∙103 | 7.09∙103 |
| Line 4  Preceding vehicle at 50 m in the case of Right-Hand Traffic | 0.3°U | 1.7°L to 1.0°R | 1.85∙103 | 2.22∙103 | 2.41∙103 |
| > 1.0°R to 1.7°R | 2.50∙103 | 3.00∙103 | 3.25∙103 |
| Line 4  Preceding vehicle at 50 m in the case of Left-Hand Traffic | 1.7°R to 1.0°L | 1.85∙103 | 2.22∙103 | 2.41∙103 |
| > 1.0°L to 1.7°L | 2.50∙103 | 3.00∙103 | 3.25∙103 |
| Line 5  Preceding vehicle at 100 m in the case of Right-Hand Traffic | 0.15°U | 0.9°L to 0.5°R | 5.30∙103 | 6.36∙103 | 6.89∙103 |
| > 0.5°R to 0.9°R | 7.00∙103 | 8.40∙103 | 9.10∙103 |
| Line 5  Preceding vehicle at 100 m in the case of Left-Hand Traffic | 0.9°R to 0.5°L | 5.30∙103 | 6.36∙103 | 6.89∙103 |
| > 0.5°L to 0.9°L | 7.00∙103 | 8.40∙103 | 9.10∙103 |
| Line 6  Preceding vehicle at 200 m in the case of Left-Hand Traffic and Right-Hand Traffic | 0.1°U | 0.45°L to 0.45°R | 1.60∙104 | 1.92∙104 | 2.08∙104 |

| Part B | *Element a* | *Angular coordinates*  *in deg.* | | *Max. luminous intensity b in cd* | | |
| --- | --- | --- | --- | --- | --- | --- |
| *Column A* | *Column B* | *Column C* |
| *vertical* | *horizontal* | *≙ 0% CoP* | *≙ 20% CoP* | *≙ 30% CoP* |
| 50L | 0.86°D | 3.43°L | 2.55∙103 | 2.04∙103 | 1.79∙103 |
| 50V | 0.86°D | 0° | 5.10∙103 | 4.08∙103 | 3.57∙103 |
| 50R | 0.86°D | 1.72°R | 5.10∙103 | 4.08∙103 | 3.57∙103 |
| 25LL | 1.72°D | 16°L | 1.18∙103 | 9.44∙102 | 8.26∙102 |
| 25RR | 1.72°D | 11°R | 1.18∙103 | 9.44∙102 | 8.26∙102 |

*Notes:* In the Table 36

a Angular positions are indicated for right-hand traffic.

b The photometric requirements for each single measuring point (angular position) of this lighting function apply to half of the sum of the respective measured values from all lighting units of the system applied for this function.

Each of the lines defined in part A of Table 36, in conjunction with the test points as prescribed in part B of Table 36 shall be measured individually corresponding to the signal provided by the signal generator.

In the case where the passing-beam, which meets the requirements of paragraph 6.2.1.1.4.1, is continuously operated in conjunction with the adaptation of the driving-beam, the photometric requirements in Part B of Table 36 shall not be applied.