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COUNCIL DIRECTIVE

of 27 July 1976

on the approximation of the laws of the Member States relating to direction indicator lamps for motor vehicles and their trailers

(76/759/EEC)

(OJ L 262, 27.9.1976, p. 71)

Amended by:

		Official Journal		
		No	page	date
►**M1**	Council Directive 87/354/EEC of 25 June 1987	L 192	43	11.7.1987
►**M2**	Commission Directive 89/277/EEC of 28 March 1989	L 109	25	20.4.1989

Amended by:

►**A1**	Act of Accession of Greece	L 291	17	19.11.1979
►**A2**	Act of Accession of Spain and Portugal	L 302	23	15.11.1985

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COUNCIL DIRECTIVE

of 27 July 1976

on the approximation of the laws of the Member States relating to direction indicator lamps for motor vehicles and their trailers

(76/759/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament [1],

Having regard to the opinion of the Economic and Social Committee [2],

Whereas the technical requirements which motor vehicles must satisfy pursuant to national laws relate *inter alia* to their direction indicator lamps;

Whereas those requirements differ from one Member State to another; whereas it is therefore necessary that all Member States adopt the same requirements either in addition to or in place of their existing rules, in order, in particular, to allow the EEC type-approval procedure which was the subject of Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers [3], to be introduced in respect of each type of vehicle;

Whereas in Directive 76/756/EEC [4], the Council laid down the common requirements for the installation of lighting and light-signalling devices on motor vehicles and their trailers;

Whereas a harmonized type-approval procedure for direction indicator lamps makes it possible for each Member State to check compliance with the common construction and testing requirements and to inform the other Member States of its findings by sending a copy of the component type-approval certificate completed for each type of direction indicator lamp; whereas the placing of an EEC component type-approval mark on all direction indicator lamps manufactured in conformity with the approved type obviates any need for technical checks on these direction indicator lamps in the other Member States;

Whereas, it is desirable to take into account the technical requirements adopted by the UN Economic Commission for Europe in its Regulation No 6 ('Uniform provisions for the approval of direction indicators for motor vehicles (except motor cycles) and their trailers') [5], which is annexed to the Agreement of 20 March 1958 concerning the adoption of uniform conditions for approval and reciprocal recognition of approval for motor vehicle equipment and parts;

Whereas the approximation of national laws relating to motor vehicles entails reciprocal recognition by Member States of the checks carried out by each of them on the basis of the common requirements,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. Each Member State shall grant EEC component type-approval for any type of direction indicator lamp which satisfies the construction and testing requirements laid down in Annexes 0, I, III, IV and V.

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(1) OJ No 28, 17. 2. 1967, p. 458/67.
(2) OJ No 224, 5. 12. 1966, p. 3802/66.
(3) OJ No L 42, 23. 2. 1970, p. 1.
(4) See page 1 of this Official Journal.
(5) Economic Commission for Europe, Document E/ECE/324, Addendum 5 of 22 May 1967.

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2. The Member State which has granted EEC component type-approval shall take the measures required in order to verify that production models conform to the approved type, in so far as this is necessary and if need be in cooperation with the competent authorities in the other Member States. Such verification shall be limited to spot checks.

Article 2

Member States shall, for each type of direction indicator lamp which they approve pursuant to Article 1, issue to the manufacturer, or to his authorized representative, an EEC component type-approval mark conforming to the model shown in Annex III.

Member States shall take all appropriate measures to prevent the use of marks liable to create confusion between direction indicator lamps which have been type-approved pursuant to Article 1, and other devices.

Article 3

1. No Member State may prohibit the placing on the market of direction indicator lamps on grounds relating to their construction or method of functioning if they bear the EEC component type-approval mark.

2. Nevertheless, a Member State may prohibit the placing on the market of direction indicator lamps bearing the EEC component type-approval mark which consistently fail to conform to the approved type.

That State shall forthwith inform the other Member States and the Commission of the measures taken, specifying the reasons for its decision.

Article 4

The competent authorities of each Member State shall within one month send to the competent authorities of the other Member States a copy of the component type-approval certificates, an example of which is given in Annex II, completed for each type of direction indicator lamp which they approve or refuse to approve.

Article 5

1. If the Member State which has granted EEC component type-approval finds that a number of direction indicator lamps bearing the same EEC component type-approval mark do not conform to the type which it has approved, it shall take the necessary measures to ensure that production models conform to the approved type. The competent authorities of that State shall advise those of the other Member States of the measures taken, which may, where there is consistent failure to comform, extend to withdrawal of EEC component type-approval. The said authorities shall take the same measures if they are informed by the competent authorities of another Member State of such failure to conform.

2. The competent authorities of Member States shall within one month inform each other of any withdrawal of EEC component type-approval, and of the reasons for such a measure.

Article 6

Any decision taken pursuant to the provisions adopted in implementation of this Directive to refuse or withdraw component type-approval for a direction indicator lamp or prohibit its placing on the market or use shall set out in detail the reasons on which it is based. Such decisions shall be notified to the party concerned, who shall at the time be informed of the remedies available to him under the laws in force in the Member States and of the time limits allowed for the exercise of such remedies.

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Article 7

No Member State may refuse to grant EEC type-approval or national type-approval of a vehicle on grounds relating to its direction indicator lamps if these bear the EEC component type-approval mark and are fitted in accordance with the requirements laid down in Directive 76/756/EEC.

Article 8

No Member State may refuse or prohibit the sale, registration, entry into service or use of any vehicle on grounds relating to its direction indicator lamps if these bear the EEC component type-approval mark and are fitted in accordance with the requirements laid down in Directive 76/756/EEC.

Article 9

For the purposes of this Directive, 'vehicle' means any motor vehicle intended for use on the road, with or without bodywork, having at least four wheels and a maximum design speed exceeding 25 km/h, and its trailers, with the exception or vehicles which run on rails, agricultural tractors and machinery and public works vehicles.

Article 10

Any amendments necessary to adjust the requirements of the Annexes to take account of technical progress shall be adopted in accordance with the procedure laid down in Article 13 of Directive 70/156/EEC.

Article 11

1. Member States shall adopt and publish the provisions necessary in order to comply with this Directive before 1 July 1977 and shall forthwith inform the Commission thereof. They shall apply these provisions from 1 October 1977 at the latest.

2. Once this Directive has been notified, the Member States shall also ensure that the Commission is informed, in sufficient time for it to submit its comments, of any draft laws, regulations or administrative provisions which they propose to adopt in the field covered by this Directive.

Article 12

This Directive is addressed to the Member States.

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List of Annexes

Annex 0 (*)	—Definition, general specifications, intensity of light emitted, test procedure, colour of light emitted, conformity of production
Annex I (*)	— Categories of direction indicator lamps: minimum angles required for light distribution in space
Annex II	— Model EEC component type-approval certificate
Annex III	— EEC component type-approval and marking requirement
	— Appendix: Example of an EEC component type-approval mark
Annex IV (*)	— Photometric measurements
Annex V (*)	— Colour of light emitted, trichromatic coordinates

(*) The technical requirements of this Annex are similar to those of Regulation No 6 of the Economic Commission for Europe. In particular, the breakdown into sections is the same. For this reason, where a section of Regulation No 6 has no counterpart in this Directive, its number is given in brackets for the record.

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ANNEX 0

DEFINITION, GENERAL SPECIFICATIONS, INTENSITY OF LIGHT EMITTED, TEST PROCEDURE, COLOUR OF LIGHT EMITTED, CONFORMITY OF PRODUCTION

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1. DEFINITIONS

1.1. The definitions set out in Directive 76/756/EEC of:

— direction indicator lamp,

— lamp,

— light source with regard to filament lamps,

— independent lamps,

— grouped lamps,

— combined lamps,

— reciprocally incorporated lamps,

— device,

— single-function lamp,

— illuminating surface of a signalling lamp other than a reflex reflector,

— apparent surface,

— light-emitting surface,

— axis of reference,

— centre of reference,

— single lamp,

— two lamps or an even number of lamps

shall apply to this Directive.

1.2. Type of direction indicator lamp

'Type of direction indicator lamp' means lamps that do not differ in such essential respects as:

1.2.1. Make or trade mark.

1.2.2. Characteristics of the optical system (luminous intensity, angle of light distribution, etc.).

1.2.3. Direction indicator category.

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(2.)

(3.)

(4.)

5. GENERAL SPECIFICATIONS

5.1. Each sample shall conform to the specifications set forth in sections 6 and 8.

5.2. The devices shall be so designed and constructed that under normal conditions of use, notwithstanding any vibration to which they may be subjected during such use, their satisfactory operation remains assured and they retain the characteristics prescribed by this Directive.

6. INTENSITY OF LIGHT EMITTED

6.1. In the reference axis, the light emitted by each of the two samples must be of not less than the minimum intensity and of not more than the maximum intensity specified below:

▼M2

Category of direction indicator (1)	Minimum intensity (cd)	Maximum intensity, in cd, when used		Total for the set of two lamps (see Annex III, item 4.3.3)
		As a single lamp	As a single lamp bearing the mark 'D' (see Annex III, item 4.3.3)	
1	175	700 (2)	490 (2)	980 (2)
1 a	250	800 (2)	560 (2)	1 120 (2)
1 b	400	860 (2)	600 (2)	1 200 (2)
2 a	50	200	140	280
2 b daytime	175	700 (2)	490 (2)	980 (2)
night-time	40	120 (2)	84 (2)	168 (2)
5	0,6	200	140	280

(1) The installation of front direction indicator lamps of different categories on motor vehicles and their trailers is governed by the Directive relating to the installation of lighting and light-signalling devices (Directive 76/756/EEC).

(2) The total value of the maximum intensity of a set of two lamps is obtained by multiplying the value specified for a single lamp by a factor of 1.4.

Where two single-function lamps with the same function, regardless of whether they are identical, are grouped together in a single device such that the projections of the illuminating surface of the single-function lamps on a vertical plane perpendicular to the median longitudinal plane of the vehicle cover not less than 60 % of the smallest rectangle circumscribed by the projections of the said illuminating surfaces, the set is treated as a single lamp for the purposes of installation on a vehicle. In that case, each single-function lamp must comply with the minimum required intensity values, while the two lamps to be used simultaneously must not exceed the permitted maximum intensity values (last column in the table).

In the case of a single lamp with more than one light source:

— the lamp must comply with the minimum required intensity value in the event of failure of one light source, and

— where all the light sources are in operation, the maximum intensity specified for a single-function lamp may be exceeded on condition that it does not bear the mark 'D' and the maximum specified intensity for the set of two lamps (last column in the table) is not exceeded.

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6.2. Outside the reference axis, within the fields specified in the arrangement diagrams in Annex I, intensity of the light emitted by each of the two samples must:

6.2.1. in each direction corresponding to the points in the luminous intensity distribution table reproduced in Annex IV, be not less than the value shown in the said table for the direction in question, expressed as a percentage of the minimum specified in 6.1;

▼M2

6.2.1.1. contrary to the provisions of 6.2 and 6.2.1, in the case of rearward direction indicators in category 5, a minimum value of 0,6 cd is required in all the fields specified in Annex I;

▼B

6.2.2. in any direction within the space from which the indicator lamp is visible, nor exceed the maximum specified in 6.1.

6.2.3. Moreover,

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6.2.3.1. throughout the fields defined in the diagrams in Annex I, the intensity of the light emitted must be not less than 0,7 cd for devices in category 1 b, not less than 0,3 cd for devices in categories 1, 1 a and 2 a and for those in category 2 b (daytime), and not less than 0,07 cd for devices in category 2 b (night-time);

6.2.3.2. for devices in categories 1 and 2 b (night-time), the intensity of the light emitted outside the area bounded by the measurement points ± 10º H and ± 10º V (10º field) must not exceed the following values:

Category of indicator	Maximum values, in cd, outside the 10º field		
	Single lamp	Single lamp bearing the mark 'D' (see Annex III, item 4.3.3)	Total for the set of two lamps (see Annex III, item 4.3.3)
2 b night-time	100	70	140

▼M2

Category of indicator	Maximum values, in cd, outside the 10º field		
	Single lamp	Single lamp bearing the mark 'D' (see Annex III, item 4.3.3)	Total for the set of two lamps (see Annex III, item 4.3.3)
1	400	280	560

Between the limits of the 10º field (± 10º H and ± 10º V) and those of the 5º field (± 5º H and ± 5º V), the maximum values shall increase in a linear fashion up to the values defined in 6.1;

6.2.3.3. for devices in categories 1 a and 1 b, the intensity of the light emitted outside the area bounded by the measurement points ± 15º H and ± 15º V (15º field) must not exceed the following values:

Category of indicator	Maximum values, in cd, outside the 15º field		
	Single lamp	Single lamp bearing the mark 'D' (see Annex III, item 4.3.3)	Total for the set of two lamps (see Annex III, item 4.3.3)
1 a	250	175	350
1 b	400	280	560

Between the limits of the 15º field (± 15º H and ± 15º V) and those of the 5º field (± 5º H and ± 5º V), the maximum permitted values for the light intensity shall increase in a linear fashion up to the values defined in 6.1;

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►M2 6.2.3.4. ◄ the requirements of 2.2 of Annex IV on local variations of intensity must be observed.

▼M2

6.3. The intensities shall be measured while the filament lamp(s) are continuously alight.

6.4. In the case of devices in category 2 b, the delay between the moment the circuit is closed and the light intensity measured on the axis of reference reaches 90 % of the value determined in accordance with 6.3 above must be measured in both daytime and night-time conditions of use. The time measures for night-time conditions of use must not exceed that measured for daytime conditions of use.

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►M2 6.5. ◄ Annex IV, referred to in 6.2.1, gives particulars of the measurement methods to be used.

7. TEST PROCEDURE

7.1. All measurements shall be carried out with colourless standard filament lamps of the types recommended for the device, and so regulated as to produce the normal luminous flux prescribed for those types of lamp.

▼M2

7.2. Nevertheless, in the case of category 2 b indicators for which an additional system [1] is used with a view to obtaining the intensity required for night-time use, the voltage applied to the system for measuring the night-time intensity must be the same as that applied to the filament lamp for measuring the daytime intensity.

7.3. The vertical and horizontal edges of the illuminating surface of a light-signalling device must be determined and dimensioned with respect to the centre of reference.

8. COLOUR OF LIGHT EMITTED

The colour of the light emitted must be within the limits of the coordinates laid down in Annex V.

[1] The operating and installation conditions for this additional device are laid down by specific provisions.

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9. CONFORMITY OF PRODUCTION

Every device bearing an EEC component type-approval mark must conform to the approved type and comply with the photometric conditions specified in sections 6 and 8. Nevertheless, in the case of a device picked at random from series production, the requirements as to minimum intensity of the light emitted (measured with a standard filament lamp as referred to in section 7) shall be limited in each relevant direction to 80 % of the minimum values specified in 6.1 and 6.2.

(10.)

(11.)

(12.)

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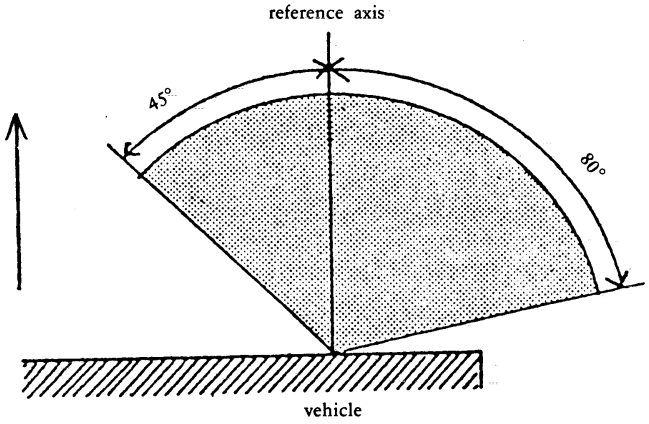
ANNEX I

CATEGORIES OF DIRECTION INDICATOR LAMPS: MINIMUM ANGLES REQUIRED FOR LIGHT DISTRIBUTION IN SPACE OF DIRECTION INDICATOR LAMPS OF THESE CATEGORIES (1)

In all cases, the minimum vertical angles of light distribution in space of direction indicator lamps are 15º above and 15º below the horizontal.

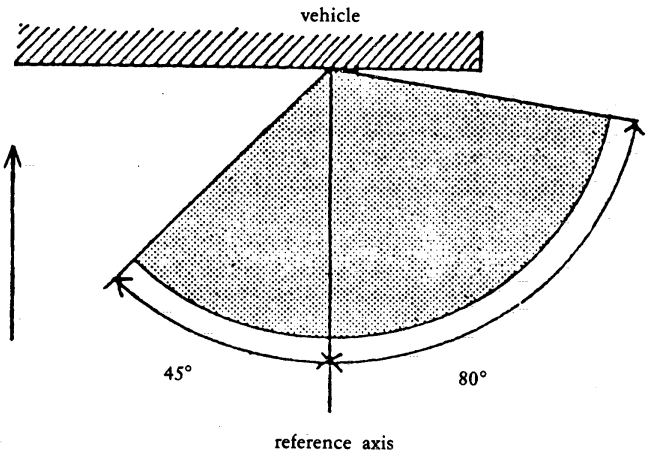
Minimum horizontal angles of light distribution in space:

Categories 1, 1 a and 1 b: Direction indicators for the front of the vehicle.



Category 2a: Direction indicators with one level of intensity for the rear of the vehicle.

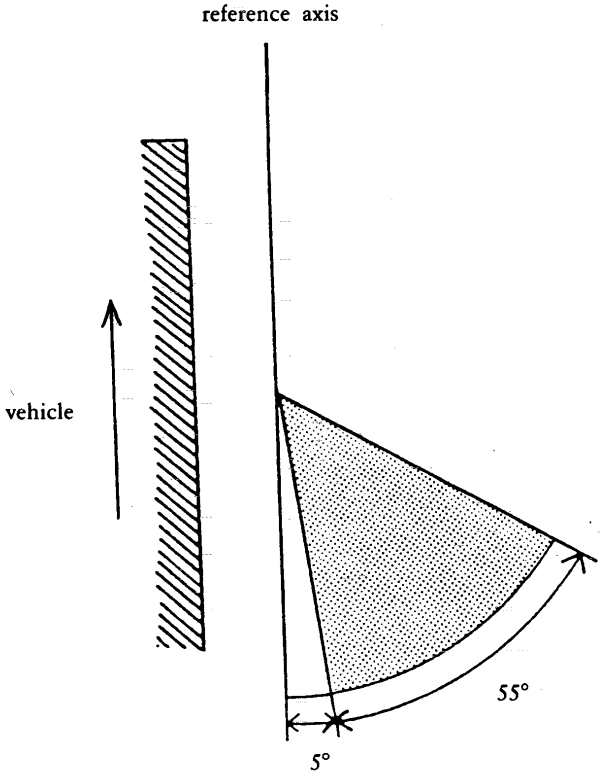
Category 2 b: Direction indicators with two levels of intensity for the rear of the vehicle.



(1) The angles shown in these diagrams correspond to devices intended to be mounted on the right-hand side of the vehicle. The arrows in these diagrams point towards the front of the vehicle.

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Category 5: Side repeater indicators for use on a vehicle that is also equipped with category 1, 1 a or 1 b, and 2 a or 2 b direction indicators.



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ANNEX II

MODEL EEC COMPONENT TYPE-APPROVAL CERTIFICATE

(Maximum format: A4 (210 × 297 mm))

▶(1)(2)(3)(4)(5)(6)(7)(8)(9)(10)(11)(12)(13)(14)(15)(16)(17)(18)(19)M2

Name of administration

Notification concerning the granting, refusal or withdrawal of EEC component type-approval for a type of direction indicator lamp

Component type-approval No .....

▶(1)1. Device (*)
— in category 1
— in category 1a
— in category 1b
— in category 2a
— in category 2b
— in category 5
which may/may not (*) be used in a two lamp unit ◀

▶(2)2. For indicators in category 2b, state the system used for obtaining the night-time intensity (main characteristics).....
.....◀

▶(3)3.◀ Type and number of filament lamps .....

▶(4)4.◀ Trade name or mark .....

▶(5)5.◀ Name and address of manufacturer .....

▶(6)6.◀ If applicable, name and address of manufacturer's authorized representative .....
.....

▶(7)7.◀ Submitted for EEC component type-approval on .....

▶(8)8.◀ Technical service conducting EEC component type-approval tests .....

▶(9)9.◀ Date of report issued by that service .....

▶(10)10.◀ Number of report issued by that service .....

▶(11)11.◀ Date of granting/refusal/withdrawal of EEC component type-approval (*) .....
.....

▶(12)12.◀ Single EEC component type-approval granted on the basis of 3.3 of Annex III for a lighting and light-signalling device comprising several lamps, and in particular: .....
.....

▶(13)13.◀ Date of refusal/withdrawal (*) of single EEC component type-approval .....
.....

▶(14)14. Component type approval granted for replacement on vehicles in service only: yes/no(*) ◀

▶(15)15.◀ Place .....

▶(16)16.◀ Date .....

▶(17)17.◀ Signature .....

▶(18)18.◀ The attached drawing No ..... shows the geometrical position in which the device is to be mounted on the vehicle, and the axis of reference and centre of reference of the device

▶(19)19.◀ Remarks .....
.....

(*) Delete where inapplicable.

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ANNEX III

EEC COMPONENT TYPE-APPROVAL AND MARKING REQUIREMENTS

1. APPLICATION FOR EEC COMPONENT TYPE-APPROVAL

1.1. The application for EEC component type-approval shall be submitted by the holder of the trade name or mark or by his authorized representative.

1.2. For each type of direction indicator lamp, the application shall be accompanied by the following:

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1.2.1. an indication of which of categories 1, 1 a, 1 b, 2 or 5 the direction indicator belongs to and, if it belongs to category 2, whether it has one level of intensity (category 2 a) or two levels of intensity (category 2 b), and, furthermore, whether the direction indicator may also be used in a set of two lamps of the same category;

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1.2.2. a brief technical specification stating, in particular, the type of filament lamp or lamps prescribed;

▼M2

1.2.3. drawings (three copies), in sufficient detail to permit identification of the type and category and showing, geometrically, the position in which the device is to be mounted on the vehicle, the axis of observation to be taken as the axis of reference in the tests (horizontal angle H = 0º, vertical angle V = 0º), the point to be taken as the centre of reference in the said tests, the vertical and horizontal tangents to the illuminating surface and their distance from the centre of reference of the lamp.

In the case of a category 2 b direction indicator lamp, diagram and a statement of the characteristics of the system providing the two levels of intensity;

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1.2.4. two samples; even if the sample devices are such that they can be remounted only on one side of the vehicle, the two samples submitted may be identical and be suitable for mounting only on the right or only on the left side of the vehicle.

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In the case of a category 2b direction indicator the request must moreover be accompanied by two samples of the parts making up the system providing the two levels of intensity.

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2. MARKINGS

2.1. Devices submitted for EEC component type-approval must bear:

2.1.1. the trade name or mark of the applicant, which shall be clearly legible and indelible;

2.1.2. a clearly legible and indelible marking indicating the type or types of filament lamp recommended;

2.1.3. and incorporate a space large enough to contain the EEC component type-approval mark and the additional symbols prescribed in section 4; this space shall be shown in the drawings mentioned in 1.2.3.

3. EEC COMPONENT TYPE-APPROVAL

3.1. If all the samples submitted in accordance with section 1 meet the requirements of Annexes 0, I, III, IV and V, EEC component type-approval shall be granted and a component type-approval number assigned.

3.2. This number shall not be assigned to any other type of direction indicator lamp.

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Direction indicators of different categories may bear a single type-approval number where they make up a set.

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3.3. Where EEC type-approval is requested for a type of lighting and light-signalling device comprising a direction indicator lamp ►M2 , grouped,

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combined or reciprocally incorporated with other lamps ◄, a single EEC type-approval ►M2 number ◄ may be issued provided that the direction indicator lamp complies with the requirements of this Directive and that each of the other lamps forming part of the lighting and light-signalling device for which EEC type-approval is requested, complies with the specific Directive applying to it.

4. MARKS

4.1. Every direction indicator lamp conforming to a type approved under this Directive shall bear an EEC component type-approval mark.

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4.2. This mark shall consist of a rectangle surrounding the letter 'e' followed by the distinguishing number or letters of the Member State which has granted type approval:

1	for Germany,
2	for France,
3	for Italy,
4	for the Netherlands,
6	for Belgium,
9	for Spain,
11	for the United Kingdom,
13	for Luxembourg,
18	for Denmark,
21	for Portugal,
EL	for Greece,
IRL	for Ireland.

It must also include the EEC component type-approval number which corresponds to the number of the EEC component type-approval certificate issued for the type of direction indicator lamp in question (see Annex I), preceded by two figures indicating the serial number assigned to the most recent major amendment of Council Directive 76/759/EEC, on the date EEC component type approval was granted. For the present Directive, the serial number is 01.

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4.3. The EEC component type-approval mark shall be supplemented by the following additional symbols:

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4.3.1. one or more of the symbols 1, 1 a, 1 b, 2 a, 2 b or 5 according to whether the device belongs to one or more of the categories 1, 1 a, 1 b, 2 a, 2 b or 5, as referred to in 1.2.1, placed above the rectangle;

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4.3.2. an arrow shall be placed, showing in what position the device is to be mounted on devices which are such that they can be mounted only on one side of the vehicle. The arrow shall be directed outwards from the vehicle in the case of devices in categories 1 and 2 and towards the front of the vehicle in the case of devices in category 5. ►M2 The arrow shall be directed outwards from the vehicle in the case of devices in categories 1, 1 a, 1 b, 2 a and 2 b and towards the front of the vehicle in the case of devices in category 5 (see Appendix 3); ◄

▼M2

4.3.3. On devices that may be used as a single lamp or as part of a set of two lamps, the additional letter 'D' to the right of the symbol in 4.3.1.

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4.4. The EEC component type-approval number must be placed in any convenient position near the rectangle surrounding the letter 'e'.

4.5. The EEC component type-approval mark and the additional symbol(s) must be affixed to the lens or one of the lenses in such a way as to be indelible and clearly legible even when the direction indicator lamps are fitted on the vehicle.

▼M2

4.6. Examples of the EEC component type-approval mark for an independent lamp are shown in Appendix 1.

4.7. Where a single EEC component type-approval number is issued, as under 3.3, for a type of lighting and light-signalling device comprising a direction indicator lamp that is grouped, combined or reciprocally incorporated with other lamps, one EEC component type-approval mark only may be affixed, consisting of:

— a rectangle surrounding the letter 'e' followed by the distinguishing number or letters of the Member State which has granted the type approval,

— the EEC component type-approval number and, where necessary, the appropriate arrow.

4.7.1. This EEC component type-approval mark may be placed anywhere on lamps that are grouped, combined or reciprocally incorporated, provided that:

4.7.1.1. it is visible when the lamps have been installed;

4.7.1.2. no light-transmitting component of the grouped, combined or reciprocally incorporated lamps may be removed without the EEC component type-approval mark being removed at the same time.

4.7.2. The identification symbol for each lamp coresponding to each Directive in pursuance of which EEC component type approval was granted, together with the two figures given in point 4.2., final indent, and where necessary, the additional letter 'D' must be indicated:

4.7.2.1. either on the appropriate light-emitting surface;

4.7.2.2. or in a group, such that each of the grouped, combined or reciprocally incorporated lamps may be clearly identified.

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4.8. The dimensions of the various components of this mark must not be less than the largest of the minimum dimensions specified for individual markings as appended to this Annex.

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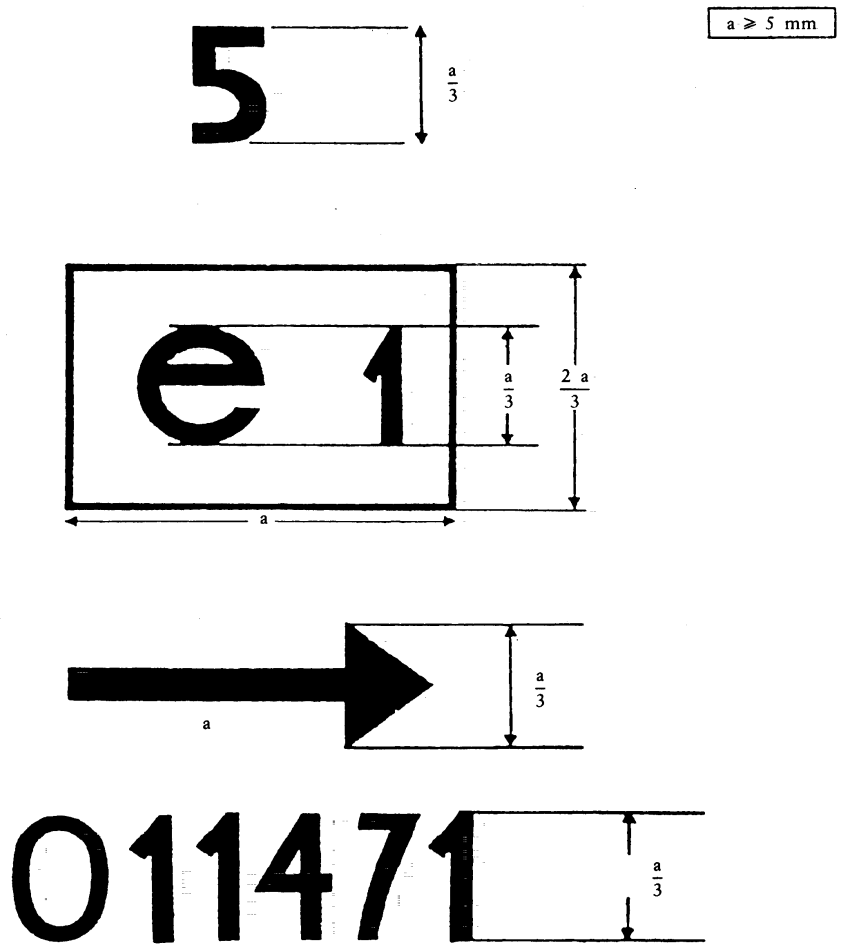
4.9. Examples of an EEC component type-approval mark for a lamp that is grouped, combined or reciprocally incorporated with other lamps are shown in Appendix 2.

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Appendix 1

EXAMPLES OF EEC COMPONENT TYPE-APPROVAL MARKS

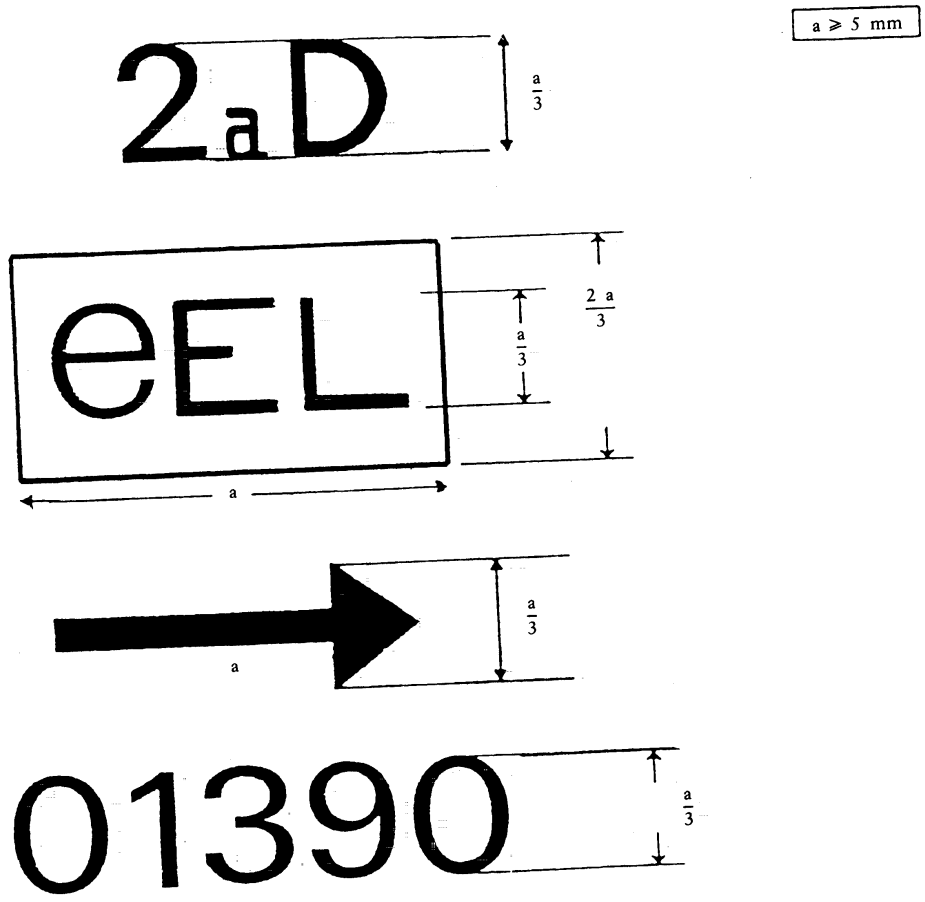
Figure 1



The device bearing the EEC component type-approval mark shown above is a direction indicator lamp in category 5, EEC type-approved in Germany (e 1) under the number 011471. The arrow shows in what position this device, which can be mounted only on one side of the vehicle, is to be mounted. The arrow is pointing towards the front of the vehicle.

▼**M2**

Figure 2

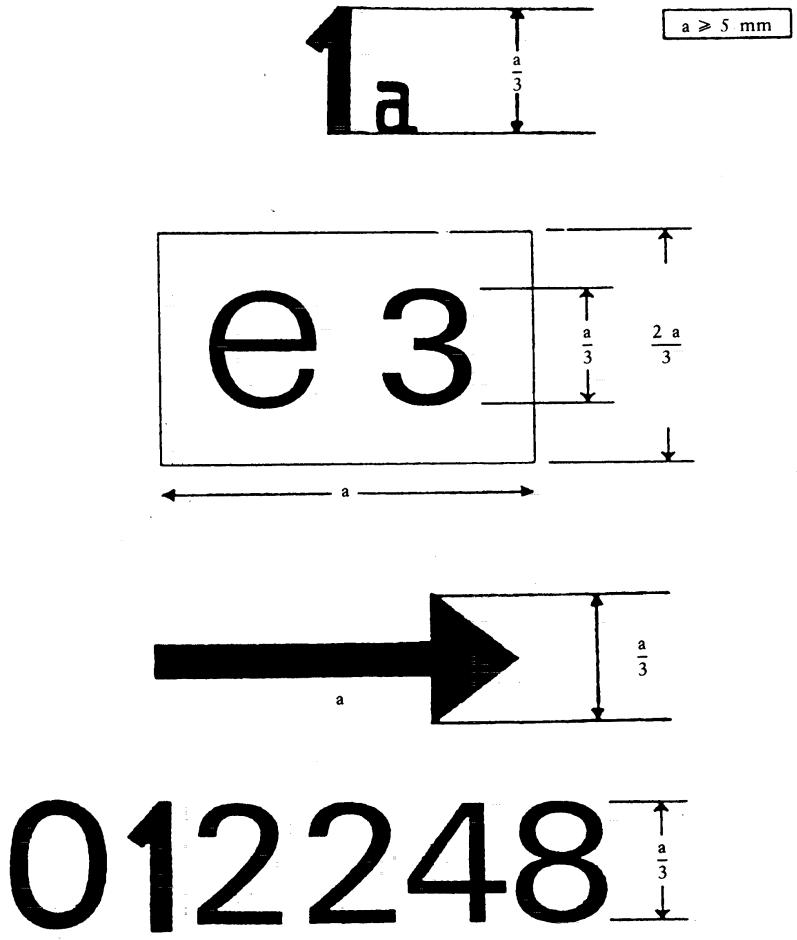


The device bearing the EEC component type-approval mark shown above is a direction indicator lamp in category 2 a, EEC type-approved in Greece (e EL) under the number 01390, which may also be used as part of a set of two lamps (letter 'D').

The arrow is pointing towards the outside of the vehicle.

▼M2

Figure 3



4The device bearing the EEC component type-approval mark shown above is a direction indicator lamp in category 1 a (for use at a distance of between 20 mm and 40 mm from the headlamp), EEC type-approved in Italy (e 3) under the number 012248.

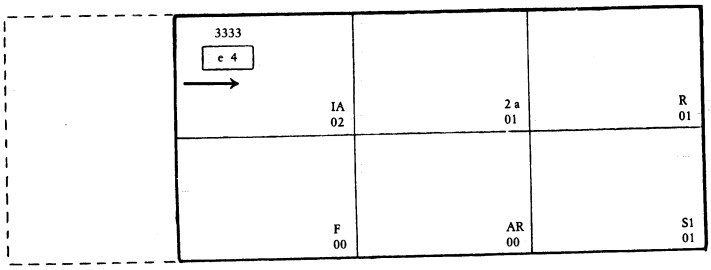
The arrow is pointing towards the outside of the vehicle.

▼**M2**

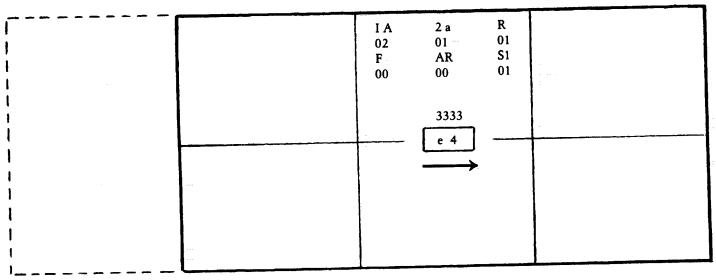
Appendix 2

Examples of simplified marking for grouped, combined or reciprocally incorporated lamps where two or more lamps form part of the same set

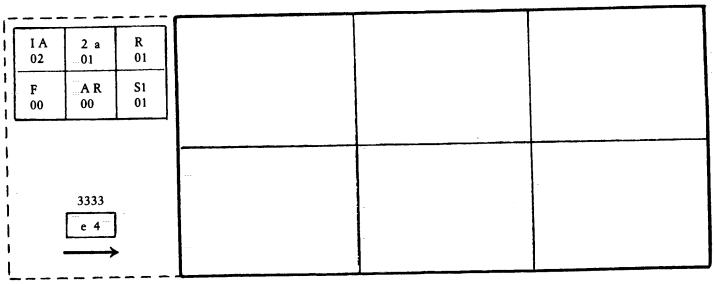
Model A



Model B



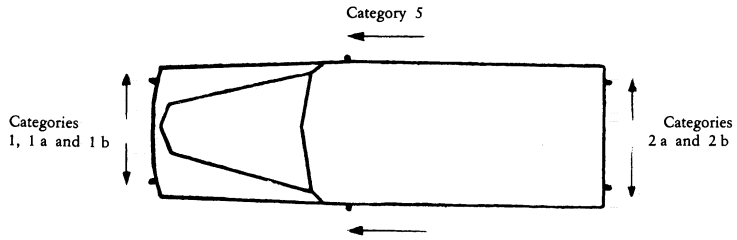
Model C



▼**M2**

Appendix 3

Direction in which the arrows on the EEC component type-approval mark point, according to the category of device



▼B

ANNEX IV

PHOTOMETRIC MEASUREMENTS

1. MEASUREMENT METHODS

1.1. During photometric measurements, stray reflections shall be prevented by appropriate masking.

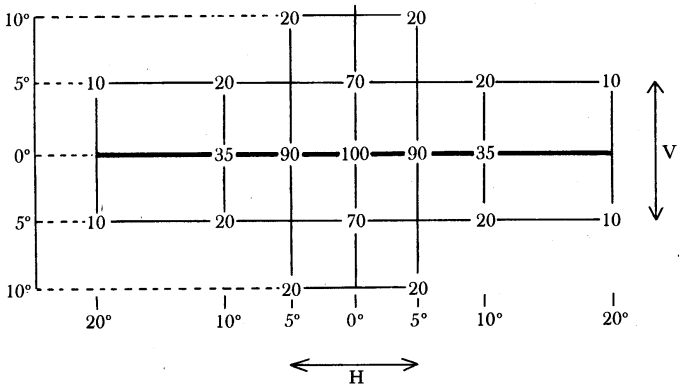
1.2. Should the results of measurements be challenged, measurements shall be carried out in such a way as to meet the following requirements:

1.2.1. the distance of measurement shall be such that the law of the inverse of the square of the distance is applicable;

1.2.2. the measuring equipment shall be such that the angular aperture of the receiver viewed from the reference centre of the light is between 10′ and 1°.

1.2.3. the intensity requirement for a particular direction of observation shall be deemed to be satisfied if that requirement is met in a direction deviating by not more than 15′ from the direction of observation.

2. STANDARD LUMINOUS INTENSITY DISTRIBUTION TABLE



2.1. The direction H = 0° and V = 0° corresponds to the reference axis. (On the vehicle, it is horizontal, parallel to the median longitudinal plane of the vehicle and oriented in the required direction of visibility). It passes through the centre of reference. The values shown in the table give, for the various directions of measurement, the minimum intensities as a percentage of the minimum required in the axis for each light (in the direction H = 0° and V = 0°).

▼M2

2.2. Inside the field of light distribution in space described in section 2, which is diagramatically represented by a grid, the light distribution should be approximately uniform, i.e. the luminous intensity in each direction of a part of the field bounded by the lines of the grid must reach not less than the lowest minimum percentage value given on the lines of the grid surrounding the direction in question.

▼B

ANNEX V

COLOUR OF LIGHT EMITTED

TRICHROMATIC COORDINATES

AMBER:	limit towards yellow:	$y \leq 0{\cdot}429$
	limit towards red:	$y \geq 0{\cdot}398$
	limit towards white:	$z \leq 0{\cdot}007$

For checking these colorimetric characteristics, a source of light at a colour temperature of ►M2 2 856 K ◄ corresponding to illuminant A of the International Commission on Illumination (CIE) shall be used.