




Repubblica di San Marino
Autorità per l'Omologazione
Republic of San Marino
Authority for Homologation

Via Consiglio del Sessanta, 99
47891 Dogana - Repubblica di San Marino

Comunicazione
Communication

	Concernente ^{2/} Concerning ^{2/}	Il rilascio dell'omologazione <i>Approval granted</i> L'estensione dell'omologazione <i>Approval-extended</i> Il rifiuto dell'omologazione <i>Approval-refused</i> La revoca dell'omologazione <i>Approval-withdrawn</i> La cessazione definitiva della produzione <i>Production-definitively discontinued</i>
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of a type of lamp pursuant to Regulation No. 148

Lamp ² :	Rear-registration plate illuminating lamp Direction indicator lamp Stop lamp Position lamp End-outline-marker lamp Reversing lamp Manoeuvring lamp Rear fog lamp Parking lamp Daytime running lamp Side marker lamp		
Category of the lamp:	2a, S1, R1, L	Change index:	0

Omologazione N. <i>Approval No.</i>	E57*148R00/06*2415	Estensione N. <i>Extension No.</i>	00
Marchio di omologazione <i>Approval mark</i>	See information document No. JH107-00		
Identificatore Unico (IU) (se applicabile) <i>Unique Identifier (UI) (if applicable)</i>	N/A		

1. Trade name or mark of the lamp:



2. Manufacturer's name for the type of lamp:

3. Manufacturer's name and address:

4. If applicable, name and address of the manufacturer's representative:

N/A

5. Submitted for approval on:

11/05/2025

6. Technical Service responsible for conducting approval tests:

AUTOMOTIVE TECHNICAL SERVICE S.r.l.
Via Consiglio dei Sessanta, 99
47891 – DOGANA Repubblica di San Marino

7. Date of report issued by that Service:

30/06/2025

8. Number of report issued by that Service:

ATS-SM-IR-148-22856

9. Concise description:

9.1. In case of

9.1.1. A rear-registration plate illuminating lamp: yes

Geometrical conditions of installation (position(s) and inclination(s) of the device in relation to the space to be occupied by the registration plate and/or different inclinations of this space):

See manufacturer's information document

9.1.2. A direction indicator: yes

Sequential activation of light sources: yes/no²

9.1.3. A reversing lamp: N/A

The lamp shall be installed on a vehicle only as a part of a pair of lamps: yes/no²

9.1.4. A manoeuvring lamp: N/A

The maximum mounting height: N/A

9.1.5. A daytime running lamp: N/A

9.1.5.1. Maximum luminous intensity does not exceed 700 cd: yes/no²

9.1.5.2. The daytime running lamp is intended to be reduced so that the maximum luminous intensity does not exceed 140 cd: yes/no²

9.2. By light signalling function and category:	Rear direction indicator lamp Cat. 2a Stop lamp S1 Rear position lamp R1 Rear-registration plate illuminating lamp L
For mounting either outside or inside or both ³	Outside
Colour of light emitted:	Rear direction indicator lamp: Amber Stop lamp: Red Rear position lamp: Red Rear-registration plate illuminating lamp: Colorless
Number, category and kind of light source(s):	Rear direction indicator lamp: 1*P21W Stop lamp, rear position lamp and rear-registration plate illuminating lamp: 1*P21/5W Filament light source
Lamp approved for LED substitute light source(s):	yes/no ²
If yes, category of LED substitute light source(s):	N/A
Voltage and wattage:	Rear direction indicator lamp: 12V/21W Stop lamp: 12V/21W Rear position lamp: 12V/5W Rear-registration plate illuminating lamp: 12V/5W
Light source module:	yes/no ²
Light source module specific identification code:	N/A
Only for limited mounting height of equal to or less than 750 mm above the ground, if applicable:	yes/no ²
Geometrical conditions of installation and relating variations, if any:	See manufacturer's information document
Application of an electronic light source control gear/variable intensity control:	N/A
(a) Being part of the lamp:	yes/no ²
(b) Being not part of the lamp:	yes/no ²
Input voltage(s) supplied by an electronic light source control gear/variable intensity control:	N/A
Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body):	N/A

- Variable luminous intensity, if applicable: yes/no²
- Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable: N/A
- 9.3. The front position lamp², rear position lamp², stop lamp², end-outline marker lamp², daytime running lamp², parking lamp², reversing lamp², rear fog lamp² and side marker lamp² is only for use on a vehicle fitted with a tell-tale indicating failure : yes/no²
10. Position of the approval mark: On the lens
11. Reason(s) for extension (if applicable): N/A
12. Approval **GRANTED/EXTENDED/REFUSED/WITHDRAWN²**
13. Approval granted for devices to be used on vehicles already in use only: yes/no²
14. Place: DOGANA – Repubblica di San Marino
15. Date: 04/07/2025
16. Signature:



Ing. Marco Conti
 Direttore Generale
 General Director

17. The list of documents deposited with the Type Approval Authority which has granted approval is annexed to this communication and may be obtained on request.

² Strike out what does not apply.

Allegato <i>Enclosure</i>			
Al certificato di omologazione ECE N. <i>To ECE approval certificate No.</i>		E57*148R00/06*2415*00	
Indice del fascicolo di omologazione <i>Index to the information package</i>			
Data <i>Date of issue</i>	04/07/2025	Data ultima modifica <i>Last amendment date</i>	--
1.	Clausole di garanzia e istruzioni sul diritto di presentare ricorso <i>Collateral clauses and instruction on right to appeal</i>		
2.	Rapporto(i) Finale di Ispezione N. <i>Test report(s) No.</i>	ATS-SM-IR-148-22856	Data <i>Date</i> 30/06/2025
3.	Scheda informativa N. <i>Information document No.</i>		Data <i>Date</i> 11/05/2025
			Data ultima modifica <i>Last amendment date</i> ---

Clausole di garanzia e istruzioni sul diritto di presentare ricorso

Clausole di garanzia

La produzione in serie deve essere esattamente conforme ai documenti di omologazione. Le variazioni di produzione in serie sono consentite solo con il consenso espresso del **Autorità per l'Omologazione**.

Le variazioni del nome della società, l'indirizzo e lo stabilimento di produzione, nonché una delle parti che hanno l'autorità alla consegna o eventuali rappresentanti nominati al momento del rilascio dell'omologazione, devono essere immediatamente comunicate al **Autorità per l'Omologazione**. La violazione di queste regole può portare al ritiro dell'omologazione ed inoltre può essere legalmente perseguita.

L'omologazione decade se viene restituita o ritirata o se il tipo omologato non è più conforme ai requisiti di legge. La revoca può essere fatta se non esistono più i requisiti richiesti per il rilascio e la continuazione dell'omologazione, se il titolare dell'omologazione viola gli obblighi dettati dall'omologazione, anche nel caso in cui gli obblighi derivino dalle condizioni assegnate all'interno dell'omologazione, o se è accertato che il tipo approvato non è conforme ai requisiti di sicurezza del traffico e di tutela dell'ambiente.

L'**Autorità per l'Omologazione** può verificare la corretta applicazione della delega conferita rilasciata nella presente omologazione, in qualsiasi momento. In particolare, questo include la verifica della produzione, che sia conforme, nonché le misure di controllo di conformità della produzione. Per questo, possono essere presi dei campioni dalla produzione. I dipendenti o rappresentanti dell'**Autorità per l'Omologazione** possono avere accesso senza ostacoli agli impianti di produzione e stoccaggio.

La delega conferita contenuta nella presente omologazione non è trasferibile. I diritti del marchio di terzi non sono interessati da questa omologazione.

Istruzione su diritto di ricorso

Questa omologazione è appellabile entro un mese dalla notifica. Il ricorso deve essere presentato per iscritto o come una domanda inviata all' **Autorità per l'Omologazione** - Via Consiglio dei Sessanta, 99 - 47891 Dogana - Repubblica di San Marino.

Collateral clauses and instruction on right to appeal

Collateral clauses

*The individual production of serial fabrication must be in exact accordance with the approval documents. Changes in the individual production are only allowed with express consent of the **Authority for Homologation**.*

*Changes in the name of the company, the address and the manufacturing plant as well as one of the parties given the authority to delivery or authorized representative named when the approval was granted is to be immediately disclosed to the **Authority for Homologation**. Breach of this regulation can lead to recall of the approval and moreover can be legally prosecuted.*

The approval expires if it is returned or withdrawn or if the type approved no longer complies with the legal requirements. The revocation can be made if the demanded requirements for issuance and the continuance of the approval no longer exist, if the holder of the approval violates the duties involved in the approval, also to the extent that they result from the assigned conditions to this approval, or if it is determined that the approved type does not comply with the requirements of traffic safety or environmental protection.

*The **Authority for Homologation** may check the proper exercise of the conferred authority taken from this approval at any time. In particular this means the compliant production as well as the measures for conformity of production. For this purpose samples can be taken or have taken. The employees or the representatives of the **Authority for Homologation** may get unhindered access to the production and storage facilities.*

The conferred authority contained with issuance of this approval is not transferable. Trade mark rights of third parties are not affected with this approval.

Instruction on right to appeal

*This approval can be appealed within one month after notification. The appeal is to be filed in writing or as a transcript at the **Authority for Homologation** - Via Consiglio dei Sessanta, 99 - 47891 Dogana - Repubblica di San Marino.*

Inspection Report No.: AT5-SM-IR-148-22856

Of: 30/06/2025



Type:

Manufacturer:

Inspection Report

No. AT5-SM-IR-148-22856

Inspection concerning vehicles-/ components with regard to:

Uniform provisions concerning the approval of light-signalling devices (lamps) for power-drive vehicles and their trailers:

- Rear-registration plate illuminating lamps
 - Direction indicator lamps
 - Position lamps
 - Stop lamps
 - ~~End-outline marker lamps~~
 - ~~Reversing lamps~~
 - ~~Manoeuvring lamps~~
 - ~~Rear fog lamps~~
 - ~~Parking lamps~~
 - ~~Daytime running lamps~~ [®]
 - ~~Side marker lamps~~
- (strike out what does not apply)

performed according to

UN Regulation No. 148

as last amended by

**00 series of amendments
(supplement no. 06)**

of the Economic Commission for Europe

Approval status	
Number of approval	
ECE	E57*148R00/06*2415*00

Inspection Report No.: ATS-SM-IR-148-22856



Of: 30/06/2025

Type:

Manufacturer:

0. General information

0.1. Make (trade name of manufacturer):



0.2. Type:

0.2.1. Variant(s): N/A

0.3. Name and address of manufacturer:

0.3.1. Name and address of manufacturer's authorized representative: N/A

0.3.2. Production plant(s) address(es):

0.4. Information document

No:

Date of issue: 11/05/2025

Date of last change: --

0.5. Position of the approval mark: On the lens

1 Concise description of the test object(s)

- 1.1 In case of a rear-registration plate illuminating lamp:

Applicable / Not-Applicable

Geometrical conditions of installation (position(s) and inclination(s) of the device in relation to the space to be occupied by the registration plate and/or different inclinations of this space):

See Manufacturer's information document

- 1.2 In case of a direction indicator:

Applicable / Not-Applicable

Sequential activation of light sources:

Yes/ No

- 1.3 In case of a reversing lamp:

Applicable/ Not Applicable

The lamp is installed on a vehicle only as part of a pair of lamps:

Yes/No

- 1.4 In case of a manoeuvring lamp:

Applicable/ Not Applicable

The maximum mounting height:

N/A

- 1.5 Daytime running lamp:

Applicable/ Not Applicable

- 1.5.1 Maximum luminous intensity does not exceed 700 cd:

Yes/No

- 1.5.2 The daytime running lamp is intended to be reduced so that the maximum luminous intensity does not exceed 140 cd:

Yes/No

1.6 By light signalling function and category

Lamp (function)	Symbol	Color	Light source(s)	Voltage and wattage
Rear direction indicator lamp	2a	Amber	1*P21W Filament	12V/21W
Rear registration plate illuminating lamp	L	Colorless		12V/5W
Stop lamp	S1	Red	1*P21/5W Filament	12V/21W
Rear position lamp	R1	Red		12V/5W

Inspection Report No.: ATS-SM-IR-148-22856



Of: 30/06/2025

Type:

Manufacturer:

1.6.1	For mounting	either outside or inside or both
1.6.2	Light source module:	Yes/ No
1.6.3	Light source module specific identification code:	N/A
1.6.4	Only for limited mounting height of equal to or less than 750 mm above the ground, if applicable:	Yes/ No
1.6.5	Geometrical conditions of installation and relating variations, if any:	See Manufacturer's information document
1.6.6	Application of an electronic light source control gear/variable intensity control:	N/A
	Being part of the lamp:	Yes/No
	Being not part of the lamp:	Yes/No
	Input voltage(s) supplied by an electronic light source control gear/variable intensity control:	N/A
	Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body):	N/A
	Variable luminous intensity, if applicable:	Yes/No
	Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable:	N/A
1.6.7	The front position lamp/rear position lamp/stop lamp/end-outline marker lamp/daytime running lamp/parking lamp/reversing lamp/rear fog lamp/side-marker lamp is only for use on a vehicle fitted with a tell-tale indicating failure:	Yes/ No
1.6.8	Device(s) to be used on vehicles already in use only	Yes/ No
1.7	Reasons for extension (if applicable):	N/A

Type:

Manufacturer:

2 Test conditions and measurement specifications according to UN Regulation No. 148

2.1 Test Equipment Refer to Appendix 3

2.2 Test Conditions
 In dependence on the particular lamp(s) tested, test conditions specified into paragraphs 4.7 of UN R148 apply for each lamp submitted for approval. **Conform /-Not-Conform**

2.3 Photometric measurements
 In dependence on the particular lamp(s) tested, measurements provisions and methods specified into paragraph 4.8 of UN R148 apply for each lamp submitted for approval **Conform /-Not-Conform**

2.4 Colour of light emitted
 The colour of the light emitted shall be red. **Conform /-Not-Conform**

Red:
 yellow boundary: $y \leq 0.335$
 purple boundary: $y \geq 0.980 - x$

R1	Sample No. 1	Sample No. 2
X	0.6835	0.6847
Y	0.3115	0.3108

Red:
 yellow boundary: $y \leq 0.335$
 purple boundary: $y \geq 0.980 - x$

S1	Sample No. 1	Sample No. 2
X	0.6870	0.6878
Y	0.3098	0.3085

The colour of the light emitted shall be amber.

Conform /-Not-Conform

Amber:
 green boundary: $y < -x - 0.120$
 red boundary: $y \geq 0.390$
 white boundary: $y \geq 0.790 - 0.670 x$

2a	Sample No. 1	Sample No. 2
X	0.5787	0.5793
Y	0.4141	0.4128

3 General requirements and specifications

Each lamp submitted for approval is conform to the requirements set forth in paragraph 4 of UN Regulation No. 148.

Conform / Not-Conform

UN R148
4.1 The requirements contained in sections 5 "General specifications" and 6 "Individual specifications" (and in the Annexes referenced in the said sections) of UN Regulations Nos. 48, 53, 74 or 86, and their series of amendments in force at the time of application for the lamp type approval apply to this Regulation.

Conform / Not-Conform

The requirements pertinent to each lamp and to the category/ies of vehicle on which the lamp is intended to be installed shall be applied, where its verification at the moment of lamp type approval is feasible.

Conform / Not-Conform

UN R148
4.2 The lamps are so designed and constructed that in normal conditions of use, and notwithstanding the vibrations to which they may be subjected in such use, their satisfactory operation remains assured and they retain the characteristics prescribed by UN Regulation 148.

Conform / Not-Conform

UN R148
4.3.1 **In case of replaceable light source(s):**

Applicable / Not-Applicable

UN R148
4.3.1.1 The lamp is only equipped with light source(s) approved according to UN Regulation No. 37 and/or UN Regulation No. 128, provided that no restriction on the use is made in UN Regulation No. 37 and its series of amendments in force at the time of application for type approval or in UN Regulation No. 128 and its series of amendments in force at the time of application for type approval.

Applicable / Not-Applicable

UN R148
4.3.1.2 In the case of a light source category or categories or type(s) is restricted for use in lamps on vehicles in use and originally equipped with such lamps, the applicant for type approval of the lamp shall declare that the lamp is only intended for installation on those vehicles; this is noted in the communication form, Annex 1.

Applicable / Not-Applicable

Type:

Manufacturer:

<i>UN R148</i> 4.3.1.3	The design of the lamp is such that the light source(s) can be fixed in no other position but the correct one.	Applicable / Not-Applicable
<i>UN R148</i> 4.3.1.4	The light source(s) holder shall conform to the characteristics given in IEC Publication 60061. The holder data sheet relevant to the category of light source(s) used, applies. Alternatively, where a category of LED substitute light source(s) is also prescribed, the holder data sheet relevant to the category of LED substitute light source(s) applies.	Applicable /-Not-Applicable Applicable and conform- / Not Applicable
<i>UN R148</i> 4.3.2	In the case of light source modules	Applicable / Not Applicable
<i>UN R148</i> 4.3.2.1	The design of the light source module(s) is such as: (a) That each light source module can only be fitted in no other position than the designated and correct one and can only be removed with the use of tool(s); (b) If there are more than one light source module used in the housing for a lamp, light source modules having different characteristics cannot be interchanged within the same lamp housing.	Conform /-Not-Conform
<i>UN R148</i> 4.3.2.2	The light source module(s) is tamperproof.	Conform /-Not-Conform
<i>UN R148</i> 4.3.2.3	A light source module is so designed that regardless of the use of tool(s), it isn't mechanically interchangeable with any replaceable approved light source.	Conform /-Not-Conform
<i>UN R148</i> 4.3.2.4	In the case of non-replaceable filament light source(s) or light source module(s) equipped with non-replaceable filament light source(s), the applicant shall annex to the type approval documentation a report, acceptable to the Authority responsible for type approval, that demonstrates compliance of these non-replaceable filament light source(s) with the requirements as specified in paragraph 4.11 of IEC 60809, Edition 3.	Conform /-Not-Conform

4 Specific requirements and specifications according to UN Regulation No. 148

Specific requirements applicability

UN R148 Lamps and their categories	UN R148 paragraph No.	Inspection Report Paragraph No.	Applicable (Yes / No)
Rear position lamps (Symbol R1)	Par. 5.2	4.1	Yes
Stop lamps (Symbol S1)	Par. 5.5	4.2	Yes
Direction-indicator lamps (Symbol 2a)	Par. 5.6	4.3	Yes
Rear-registration plate illuminating lamps (symbol L)	Par. 5.11	4.4	Yes

4.1 Rear position lamps (symbol R1)

Applicable / Not Applicable

UN R148 5.2.1 The light emitted by each of the two lamps supplied meets the requirements in Table below. Conform / Not Conform

Lamp(s) and lamp categories	Requirements for luminous intensity			Light distribution in space (UN R148 Annex 2, part A)	
	Minimum luminous intensity in HV	Maximum luminous intensity in any direction - single lamp	Maximum luminous intensity in any direction - lamp marked "D" (UN R148 paragraph 3.3.2.5.2.)	Minimum horizontal angles (inboard / outboard)	Minimum vertical angles (above / below)
Rear position lamps, R1 (steady)	(4)	[17]	[8.6]	45° / 80°	15° / 15°

Standard light distribution for front and rear position-, end-outline marker- lamps is conform to UN R148, Annex 3 specifications Conform / Not Conform

UN R148 5.2.2 Outside the reference axis and within the angular fields defined in the diagrams in Part A of Annex 2 (above), the intensity of the light emitted by each lamp must in each direction corresponding to the points in the table of standard light distribution reproduced in paragraph 2. of Annex 3, be not less than the minimum specified in paragraph 5.2.1., multiplied by the percentage specified in the said table for the direction in question. Conform / Not Conform

UN R148 5.2.3 However, a luminous intensity of 60 cd is permitted for rear position lamps reciprocally incorporated with stop lamps below a plane forming an angle of 5° with and downward from the horizontal plane; Conform / Not Conform

UN R148
5.2.4

Throughout the fields defined in the diagrams in Part A of Annex 2, the luminous intensity of the light emitted must be not less than 0.05 cd for rear position lamps and end-outline marker lamps,

Conform /Not Conform

Photometric test results

Sample No. 1 and Sample No. 2, 1*P21/5W

Tested voltage: 13.44V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	5L	10U	0.80	17.00	2.42	2.66	Complies
2	5R	10U	0.80	17.00	2.48	2.56	Complies
3	20R	5U	0.40	17.00	2.27	2.66	Complies
4	10R	5U	0.80	17.00	3.43	3.74	Complies
5	H	5U	2.80	17.00	4.69	4.75	Complies
6	10L	5U	0.80	17.00	3.66	3.49	Complies
7	20L	5U	0.40	17.00	2.47	2.36	Complies
8	10L	V	1.40	17.00	4.33	4.76	Complies
9	5L	V	3.60	17.00	5.03	5.30	Complies
10	H	V	4.00	17.00	5.79	5.98	Complies
11	5R	V	3.60	17.00	5.16	5.27	Complies
12	10R	V	1.40	17.00	4.56	4.52	Complies
13	20R	5D	0.40	17.00	2.06	2.32	Complies
14	10R	5D	0.80	17.00	3.12	3.40	Complies
15	H	5D	2.80	17.00	4.32	4.41	Complies
16	10L	5D	0.80	17.00	3.25	3.22	Complies
17	20L	5D	0.40	17.00	2.20	2.14	Complies
18	5L	10D	0.80	17.00	2.36	2.58	Complies
19	5R	10D	0.80	17.00	2.40	2.46	Complies
20	All Directions Min.		0.05	--	0.33	0.38	Complies
21	All Directions Max.		--	17.00	6.02	6.25	Complies

Inspection Report No.: ATS-SM-IR-148-22856

Of: 30/06/2025



Type:

Manufacturer:

4.2 Stop lamps (symbol S1)

Applicable / Not-Applicable

UN R148 5.5.1 The light emitted by each of the two lamps supplied meets the requirements in Table below Conform / Not-Conform

Requirements for luminous intensity				Light distribution in space (UN R148 Annex 2, part A)	
Lamp(s) and lamp categories	luminous intensity in HV	luminous intensity in any direction - single lamp	luminous intensity in any direction - lamp marked "D" (UN R148 paragraph 3.3.2.5.2.)	Minimum horizontal angles (inboard / outboard)	Minimum vertical angles (above / below)
Stop lamp, S1 (steady)	(60)	[260]	[130]	45° / 45°	15° / 15°

Standard light distribution for stop lamps (in dependence of their particular category is conform to UN R148 Annex 3 specifications. Conform / Not-Conform

UN R148 5.5.2 Outside the reference axis the intensity of the light emitted by each lamp is in each direction corresponding to the points in the table of standard light distribution reproduced in paragraph 2. of Annex 3 not less than the minimum specified in paragraph 5.5.1., multiplied by the percentage specified in the said table of the direction in question. Conform / Not Conform

UN R148 5.5.3 Throughout the fields defined in the diagrams in Part A of Annex 2, the luminous intensity of the light emitted is not less than 0.3 cd for devices of categories S1, S3 and M5 and for those of categories S2 and S4 by day; it is not less than 0.07 cd for devices of categories S2 and S4 by night. Conform / Not-Conform

Photometric test results

Sample No. 1 and Sample No. 2, 1*P21/5W

Tested voltage: 13.83V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	5L	10U	12.00	260.00	46.20	45.85	Complies
2	5R	10U	12.00	260.00	46.82	44.51	Complies
3	20R	5U	6.00	260.00	43.60	45.79	Complies
4	10R	5U	12.00	260.00	68.43	69.88	Complies
5	H	5U	42.00	260.00	83.73	80.72	Complies
6	10L	5U	12.00	260.00	70.88	66.09	Complies
7	20L	5U	6.00	260.00	47.54	42.08	Complies
8	10L	V	21.00	260.00	86.21	90.34	Complies
9	5L	V	54.00	260.00	98.26	100.96	Complies
10	H	V	60.00	260.00	129.16	125.71	Complies
11	5R	V	54.00	260.00	103.89	95.34	Complies
12	10R	V	21.00	260.00	92.64	82.67	Complies
13	20R	5D	6.00	260.00	38.25	39.20	Complies
14	10R	5D	12.00	260.00	60.38	61.64	Complies
15	H	5D	42.00	260.00	77.41	75.48	Complies
16	10L	5D	12.00	260.00	63.99	58.38	Complies
17	20L	5D	6.00	260.00	41.97	35.64	Complies
18	5L	10D	12.00	260.00	49.57	49.25	Complies
19	5R	10D	12.00	260.00	50.11	48.71	Complies
20	All Directions Min.		0.30	--	2.42	2.29	Complies
21	All Directions Max.		--	260.00	132.56	128.92	Complies

UN R148
4.8.11

If a rear position lamp and/or a rear end-outline marker lamp is reciprocally incorporated with a stop lamp producing either steady or variable luminous intensity, the ratio between the luminous intensities actually measured of the two lamps when turned on simultaneously at the intensity of the rear position lamp or end-outline marker lamp when turned on alone should be at least 5: 1 in the field delimited by the straight horizontal lines passing through $\pm 5^\circ$ V and the straight vertical lines passing through $\pm 10^\circ$ H of the light distribution table.

Applicable and Conform / Not-Applicable

Test results

No.	Point of the measurement		Limits		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	10R	5U	5.00	--	20.50	19.22	Complies
2	V	5U	5.00	--	18.60	17.64	Complies
3	10L	5U	5.00	--	19.86	19.52	Complies
4	10L	H	5.00	--	20.52	19.63	Complies
5	5L	H	5.00	--	20.27	19.73	Complies
6	V	H	5.00	--	23.02	21.80	Complies
7	5R	H	5.00	--	20.91	18.84	Complies
8	10R	H	5.00	--	20.94	18.97	Complies
9	10R	5D	5.00	--	19.82	18.72	Complies
10	V	5D	5.00	--	18.62	17.81	Complies
11	10L	5D	5.00	--	20.33	18.61	Complies

4.3 Direction-indicator lamps (Symbol 2a)

Applicable /-Not Applicable

UN R148
5.6.1 The light emitted by each of the two lamps supplied meets the requirements in Table below where the minimum luminous intensities are fulfilled:

(a) In the case of direction indicators of categories ~~1, 1a, 1b, 2a, 2b, 11, 11a, 11b, 11c and 12~~ in the reference axis; or **Applicable and Conform /-Not Applicable**

(b) In the case of direction indicators of categories 5 and 6 in direction A according to Annex 2. **Applicable and Conform /- Not Applicable**

Requirements for luminous intensity				Light distribution in space (UN R148 Annex 2, parts A / B)	
Lamp(s) and lamp categories	luminous intensity in HV	luminous intensity in any direction - single lamp	luminous intensity in any direction - lamp marked "D" (UN R148 paragraph 3.3.2.5.2.)	Minimum horizontal angles (inboard / outboard)	Minimum vertical angles (above / below)
Direction indicator lamp, 2a (steady)	(50)	[500]	{250}	45° / 80°	15° / 15°

Standard light distribution for direction indicators (in dependence of their particular category is conform to UN R148 Annex 3 specifications.

Conform /-Not Conform

UN R148
5.6.4 In divergence from paragraphs 4.8.3. and 4.8.3.1., for category 5 direction indicators, to the rear, a minimum value of 0.6 cd is required throughout the fields specified in Part A of Annex 2;

Applicable and Conform / Not Applicable

UN R148
5.6.5 Throughout the fields defined in the diagrams in Part A of Annex 2, the intensity of the light emitted is not less than 0.7 cd for lamps of category 1b, not less than 0.3 cd for lamps of categories 1, 1a, 2a, 11, 11a, 11b, 11c, 12 and for those of category 2b by day; it is not less than 0.07 cd for lamps of category 2b by night;

Conform /-Not Conform

Inspection Report No.:

ATS-SM-IR-148-22856



Of:

30/06/2025

Type:

Manufacturer:

Photometric test results

Sample No. 1 and Sample No. 2, 1*P21W

Tested voltage: 13.72V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
1	5L	10U	10.00	500.00	52.00	56.43	Complies
2	5R	10U	10.00	500.00	54.85	53.28	Complies
3	20R	5U	5.00	500.00	48.05	49.62	Complies
4	10R	5U	10.00	500.00	63.83	64.00	Complies
5	V	5U	35.00	500.00	173.14	167.55	Complies
6	10L	5U	10.00	500.00	63.42	65.26	Complies
7	20L	5U	5.00	500.00	50.66	50.23	Complies
8	10L	H	17.50	500.00	64.31	68.66	Complies
9	5L	H	45.00	500.00	81.76	82.20	Complies
10	H	V	50.00	500.00	263.82	258.35	Complies
11	5R	H	45.00	500.00	80.55	81.32	Complies
12	10R	H	17.50	500.00	62.69	65.55	Complies
13	20R	5D	5.00	500.00	43.61	44.26	Complies
14	10R	5D	10.00	500.00	56.69	54.99	Complies
15	V	5D	35.00	500.00	157.13	152.70	Complies
16	10L	5D	10.00	500.00	57.29	55.86	Complies
17	20L	5D	5.00	500.00	45.24	46.33	Complies
18	5L	10D	10.00	500.00	47.44	48.86	Complies
19	5R	10D	10.00	500.00	49.43	46.26	Complies
20	All Directions Min		0.30	--	1.36	1.48	Complies
21	All Directions Max		--	500.00	267.15	261.94	Complies

UN R148
5.6.11

For direction indicator lamps of sequential activation of light source(s):

Applicable and Conform/ Not Applicable

(a) Each light source, after its activation, remains lit until the end of the ON cycle;

(b) The sequence of activation of the light sources produces a signal which proceeds in a uniform progressive manner from inboard towards the outboard edge of the light emitting surface;

(c) It is one signal with no interruption and no vertical oscillations (e.g. not more than one change of direction along the vertical axis). The distance between two adjacent / tangential distinct parts of the light emitting surface of the sequential direction indicator do not exceed 50mm, when measured perpendicularly to the reference axis, instead of the values defined in paragraph 5.6.2. of UN Regulation 53. These interruptions of the signal do not create any overlap in the vertical axis between the different parts, from inboard towards the outboard of the vehicle, and are not be used for any other lighting or light signalling functions;

(d) The variation shall finish no more than 200ms after the beginning of the ON cycle;

(e) The orthogonal projection of the light emitting surfaces of the direction indicator in the direction of the axis of reference is circumscribed by a rectangle on a plane normal to the axis of reference and having its longer sides parallel to the H-plane. The ratio of the horizontal to the vertical sides is not less than 1.7.

Compliance to the conditions mentioned above is verified in flashing mode.

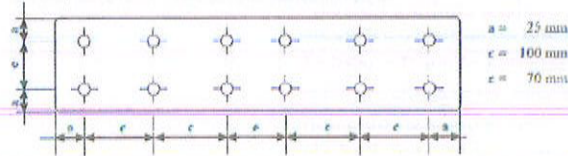
4.4 Rear-registration plate illuminating lamps (symbol L)

Applicable /-Not-Applicable

Light distribution standards for rear registration plate lamps:
Measuring points

Wide plate 520*120 mm (category: 1b):

Applicable and Conform /-Not-Applicable



ECE R148 5.11.1 The devices for the illumination of rear-registration plates of categories 1a, 1b, 1c, 2a and 2b are so constructed that the whole surface of the plate will be visible within the angles given in Part D of Annex 2.

Conform /-Not-Conform

ECE R148 5.11.2 Measuring procedure

The luminance measurements are made on a diffuse colourless surface with known diffuse reflection factor. The diffuse colourless surface has the dimensions of the registration plate or the dimension exceeding one measuring point. Its centre is placed in the centre of the positions of the measuring points.

Conform / Not-Conform

This (These) diffuse colourless surface(s) are placed in the position normally occupied by the registration plate and 2 mm in front of its holder.

Conform / Not-Conform

Type:

Manufacturer:

Luminance measurements are made perpendicularly to the surface of the diffuse colourless surface with the tolerance of 5° in each direction at the points shown in paragraph 3. of Annex 3, each point representing a circular area of 25 mm in diameter. The measured luminance is corrected for the diffuse reflection factor 1.0.

Conform / Not-Conform

ECE R148
5.11.3 At each of the points of measurement shown in paragraph 3. of Annex 3, the luminance B is at least

(a) For categories 1a, 1b, 1e, 2a and 2b equal to 2.5 cd/m²;

Applicable and Conform / Not-Applicable

(b) For categories 1 and 2 equal to 2.0 cd/m².

Applicable and Conform / Not Applicable

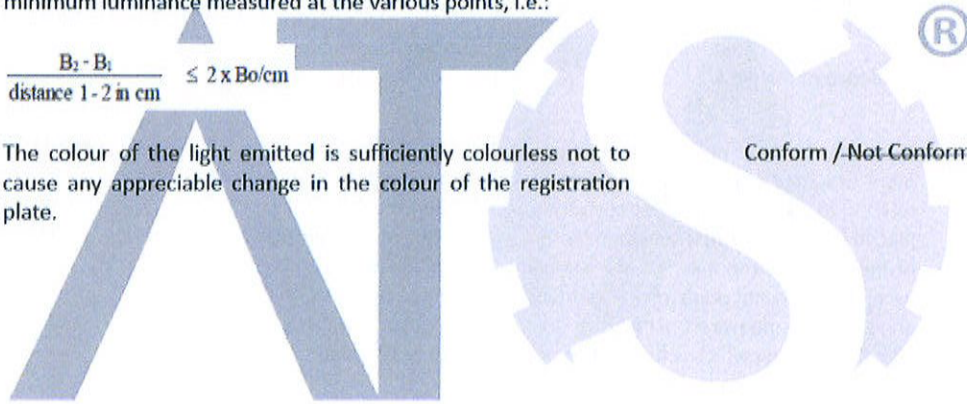
The gradient of the luminance between the values B₁ and B₂, measured at any two points 1 and 2 selected from among those mentioned above, doesnot exceed 2 x B₀/cm, B₀ being the minimum luminance measured at the various points, i.e.:

Conform / Not-Conform

$$\frac{B_2 - B_1}{\text{distance 1-2 in cm}} \leq 2 \times B_0/\text{cm}$$

ECE R148
5.11.4 The colour of the light emitted is sufficiently colourless not to cause any appreciable change in the colour of the registration plate.

Conform / Not-Conform



Inspection Report No.: AT5-SM-IR-148-22856

Of: 30/06/2025



Type:

Manufacturer:

5. Other information

Place of inspection:

Date of inspection:

18/06/2025

Technical service representative(s):

Senior Inspector

Junior Inspector
(if applicable)

Ms. Li Dan

N/A

Manufacturer's representative:

N/A

Remarks:

N/A

5.1 Appendix

1. List of modifications

2. Test Photo (s)

3. List of main equipment

5.2 Enclosures

Information Folder



dated on 11/05/2025

Inspection Report No.: ATS-SM-IR-148-22856

Of: 30/06/2025



Type:

Manufacturer:

6. Statement of conformity

The information document as given in paragraph 0.4 and the type described there are in compliance with the test specification mentioned above.

With regard to the required level of performance to be achieved, the tested items were representative for the type to be approved and cover all variants / versions described in the information folder

The tests were carried out in accordance with the relevant requirements of EN ISO/IEC 17025 and EN ISO/IEC 17020 / R148-00 ECE/UN.

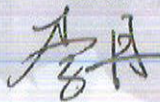
The tested object complies / ~~not complies~~ with the prescriptions of the R148-00 ECE/UN.

The inspection Report comprises pages 1 to 23.

The test results relates only to the product tested.

I shall not be reproduced except in full, without written approval of the laboratory.

Dogana, Repubblica di San Marino, 30/06/2025

Number of project and protocol	Originality Check (*)	Automotive Technical Service S.r.l. <i>Inspector</i> 	 
	 ATS-SM-PR-22856	Automotive Technical Service S.r.l. <i>Deputy Technical Director</i> 	
		(Ms. Li Dan)	
		(Eng. Bogdan Nicolae Domnescu)	

(*) To check the originality of documents, scan the QR Code or connect to the site <https://www.ats.sm/originality-control-atp-adr-tyapp/> and follow the instruction in it.

Inspection Report No.: ATS-SM-IR-148-22856

Of: 30/06/2025



Type:

Manufacturer:

Appendix 1

List of modifications

Applicable/ Not Applicable

Appendix 1

More details for application of:

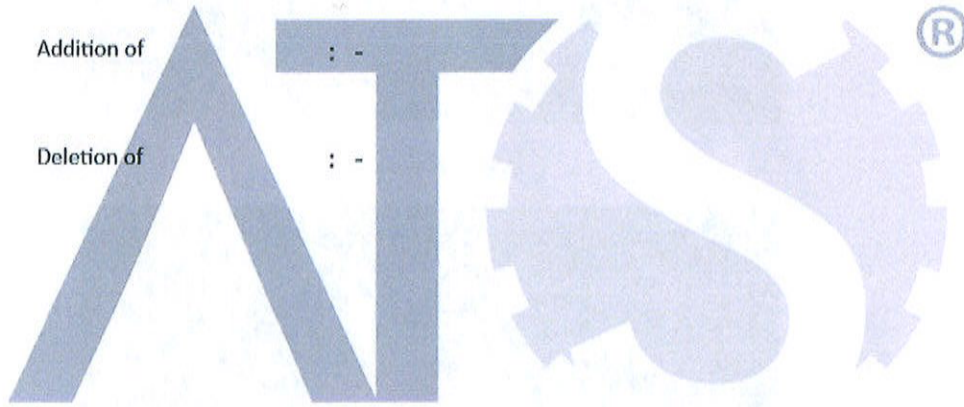
Date :

Correction of : -

Modification of : -

Addition of : -

Deletion of : -



Inspection Report No.:

ATS-SM-IR-148-22856



Of:

30/06/2025

Type:

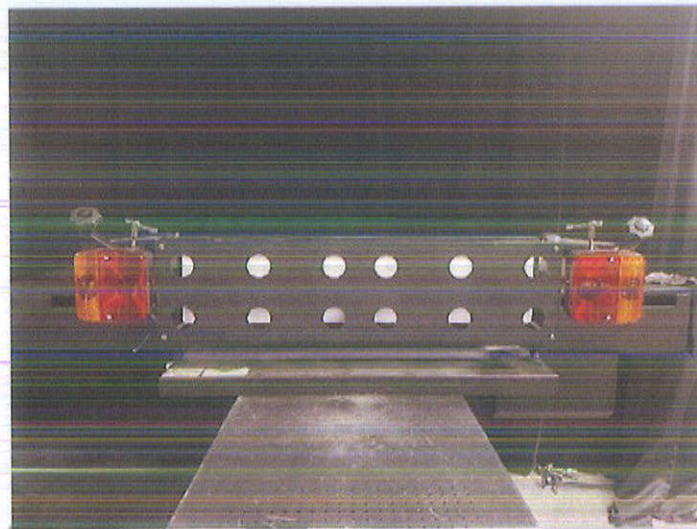
Manufacturer:

Appendix 2

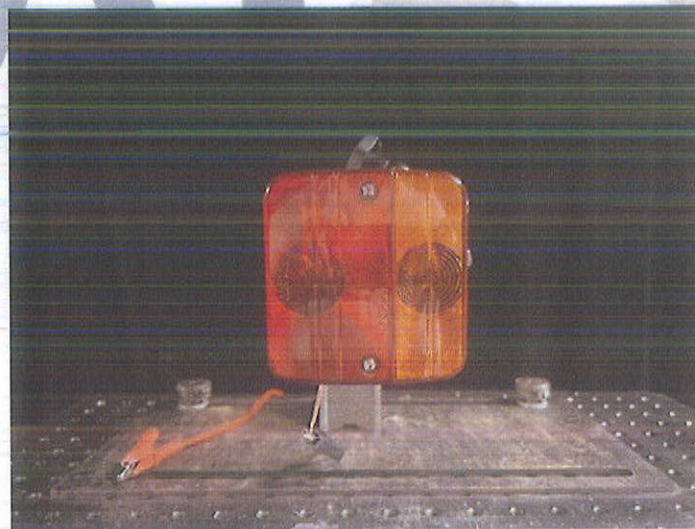
Test Photo(s)

Applicable / Not Applicable

Appendix 2



License plate lamp



Rear group lamp

Inspection Report No.: AT5-SM-IR-148-22856

Of: 30/06/2025



Type:

Manufacturer:

Appendix 3

List of main equipment

Applicable / Not Applicable

Appendix 3

No.	Name	Type	Serial no.	Calibration due
1	Automotive and signal goniophotometer	GO-HD6	CHCML066	2025-10-15
2	High accuracy intelligent photometer head	ID-1000	CHCML066-1	2025-10-15
3	UV-VIS-near IR Spectrophotometer	PMS-2000	CHCML021	2025-10-15
4	Luminance meter for vehicle license plate lighting	LD601	CHCML014	2026-01-21

All the instruments have been calibrated and are in the period of validity.




May 11, 2025

Dear Sirs,

We would like to apply for the type approval according to ECE.

Function	ECE approval number
Rear direction indicator lamp	E57*148R00/06*XXXX*00
Stop lamp	E57*148R00/06*XXXX*00
Rear position lamp	E57*148R00/06*XXXX*00
License plate lamp	E57*148R00/06*XXXX*00

Trade name or mark	:	
Type	:	
Name and address of manufacturer	:	

We confirm that the application mentioned above has not been submitted to any other EC member state, nor has any other member state granted a corresponding approval.

Sincerely




E57*148R00/06*2415*00

Information document No.:

First application date : May 11, 2025

1. Specification data

Type					
Function		Rear group lamp			
		Rear direction indicator lamp	Stop lamp	Rear position lamp	License plate lamp
Color		Amber	Red	Red	Colorless
Rated	Voltage	12V			
	Wattage	21W	21W	5W	
Application Regulation ECE		R148.00 2a	R148.00 S1	R148.00 R1	R148.00 L
Category of light source		P21W	P21/5W		
Location of marking	Voltage/Wattage	Marked on lens			
	Trade mark				
		Marked on lens			
	Approval mark	Marked on lens			
Part number					

2. Construction and material

Construction	Material	Remarks
Lens	AS	Rear direction indicator lamp: Amber Stop lamp + Rear position lamp: Red License plate lamp: Clear
Housing	PP	--
Electrical Wiring	Copper covered with insulation	--

3. Name and address of manufacturer :

4. Name and address of the assembly plant : See 3.

5. Name and address of the manufacturer's representative : N/A

6: Apparent surface

<p>⊕ :Reference center</p> <p>U= Upper limit D= Down limit I= Inside limit O= Outside limit</p> <p style="text-align: right;">Unit: mm</p>				
Function	Limit (O)	Limit (I)	Limit (U)	Limit (D)
Rear direction indicator lamp	19	14	47	43
Stop lamp	41	15	48	43
Rear position lamp	41	15	48	43
--	--	--	--	--

Information document No.:

First application date : May 11, 2025

