




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

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

Comunicazione
Communication

	Concernente ^{2/} Concerning ^{2/}	Il rilascio dell'omologazione Approval granted L'estensione dell'omologazione Approval extended Il rifiuto dell'omologazione Approval refused La revoca dell'omologazione Approval withdrawn La cessazione definitiva della produzione Production definitively discontinued
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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, AR	Change index:	0

Omologazione N. Approval No.	E57*148R00/05*1485	Estensione N. Extension No.	00
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Marchio di omologazione Approval mark	See information document No. DY-MX5-2401-S-00
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Identificatore Unico (IU) (se applicabile) Unique Identifier (UI) (if applicable)	N/A
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1. Trade name or mark of the lamp: 
2. Manufacturer's name for the type of lamp: DY-MX5-2401-S
3. Manufacturer's name and address: Guangzhou Chiku Car Lights Co., Ltd.
Area B, Floor 3, No.5 (Workshop 2) South Xinhe Road, Baishui Village, Ningxi Street, Zengcheng District, Guangzhou
4. If applicable, name and address of the manufacturer's representative: N/A
5. Submitted for approval on: 04/08/2024
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: 27/08/2024
8. Number of report issued by that Service: ATS-SM-IR-148-14578
9. Concise description:
- 9.1. In case of
- 9.1.1. A rear-registration plate illuminating lamp: N/A
- 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): N/A
- 9.1.2. A direction indicator: yes
- Sequential activation of light sources: yes/no²
- 9.1.3. A reversing lamp: yes
- 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
- Maximum luminous intensity does not exceed 700 cd: yes/no²

9.2. By light signalling function and category:	Rear direction indicator lamp Cat. 2a Stop lamp S1 Rear position lamp R1 Reversing lamp AR
For mounting either outside or inside or both ²	Outside
Colour of light emitted:	Rear direction indicator lamp: Amber Stop lamp: Red Rear position lamp: Red Reversing lamp: White
Number, category and kind of light source(s):	Rear direction indicator lamp: 22*LEDs Stop lamp and Rear position lamp: 44*LEDs Reversing lamp: 3*LEDs Non-replaceable 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/7.5W Stop lamp: 12V/11.7W Rear position lamp: 12V/2.8W Reversing lamp: 12V/0.8W
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 /no ²

Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable:

N/A

- 9.3. The ~~front position lamp~~², rear position lamp², stop lamp², ~~end-outline marker lamp~~², daytime running 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:

09/09/2024

16. Signature:

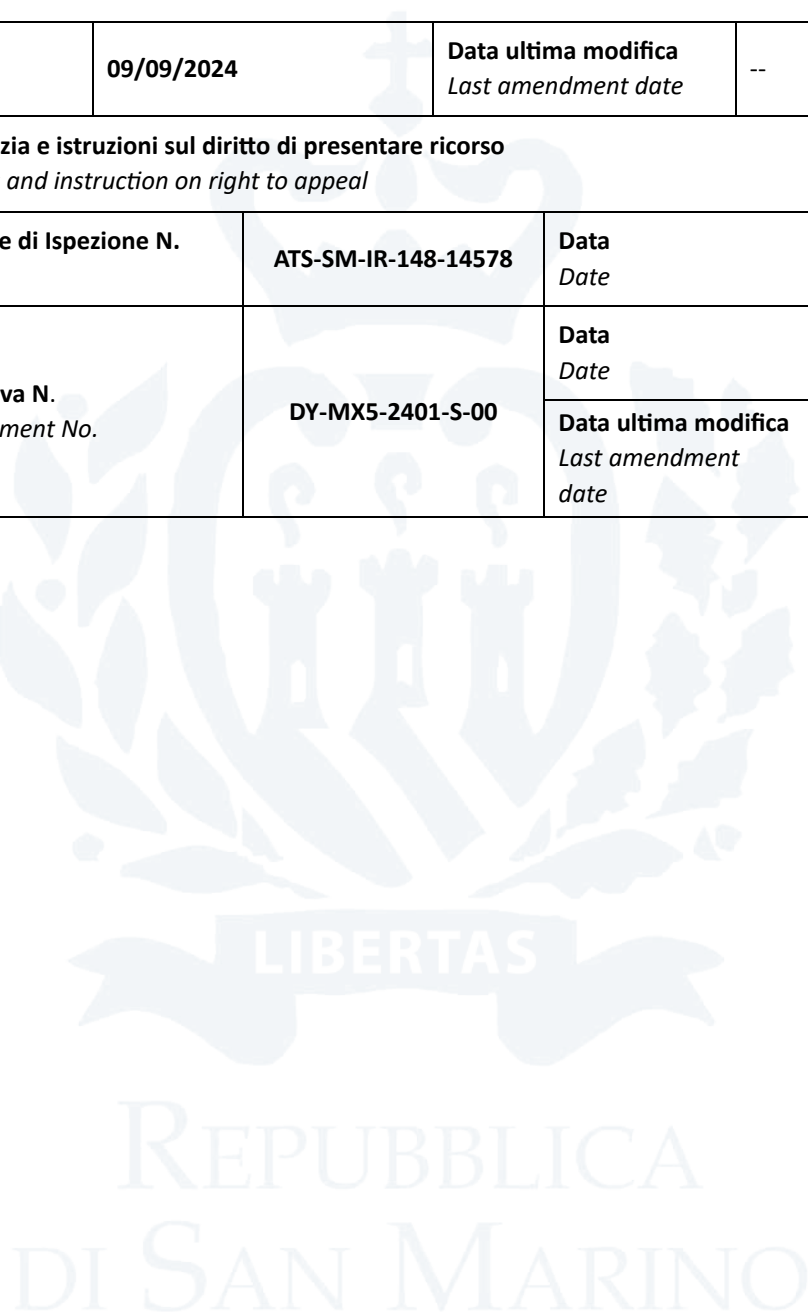


Ing. Marco Conti
Direttore Generale
General Director

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*148R00/05*1485*00		
Indice del fascicolo di omologazione <i>Index to the information package</i>				
Data <i>Date of issue</i>		09/09/2024	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-148-14578	Data <i>Date</i>	27/08/2024
3.	Scheda informativa N. <i>Information document No.</i>	DY-MX5-2401-S-00	Data <i>Date</i>	04/08/2024
			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.: ATS-SM-IR-148-14578

Of: 27/08/2024

Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.



Inspection Report

No. ATS-SM-IR-148-14578

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. 05)**

of the Economic Commission for Europe

Approval status	
ECE	Number of approval
	E57*148R00/05*1485*00

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

0. General information

0.1. Make (trade name of manufacturer):



0.2. Type: DY-MX5-2401-S

0.2.1. Variant(s): N/A

0.3. Name and address of manufacturer: Guangzhou Chiku Car Lights Co., Ltd.
Area B, Floor 3, No.5 (Workshop 2) South Xinhe Road,
Baishui Village, Ningxi Street, Zengcheng District,
Guangzhou

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

0.3.2. Production plant(s) address(es): Guangzhou Chiku Car Lights Co., Ltd.
Area B, Floor 3, No.5 (Workshop 2) South Xinhe Road,
Baishui Village, Ningxi Street, Zengcheng District,
Guangzhou

0.4. Information document
No.: DY-MX5-2401-S-00
Date of issue: 04/08/2024
Date of last changed: --

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):

N/A

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

1.6 By light signalling function and category

Lamp (function)

Symbol

Color

Light source(s)

Voltage and wattage

Rear direction indicator lamp

2a

Amber

22*LEDs
Non-replaceable

12V/7.5W

Rear position lamp

R1

Red

44*LEDs

12V/2.8W

Stop lamp

S1

Red

Non-replaceable

12V/11.7W

Reversing lamp

AR

White

3*LEDs
Non-replaceable

12V/0.8W

1.6.1 For mounting ~~either outside or inside or both~~

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Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

- 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~~ 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

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	0.6858	0.6866
Y	0.3049	0.3061

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

S1	Sample No. 1	Sample No. 2
X	0.6883	0.6892
Y	0.3040	0.3055

The colour of the light emitted shall be amber.

Conform / ~~Not Conform~~

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

2a	Sample No. 1	Sample No. 2
X	0.5799	0.5806
Y	0.4166	0.4170

The colour of the light emitted shall be white.

Conform / ~~Not Conform~~

White:
green boundary: $y = 0.150 + 0.640 x$
yellowish green boundary: $y = 0.440$
yellow boundary: $x = 0.500$
reddish purple boundary: $y = 0.382$
purple boundary: $y = 0.050 + 0.750 x$
blue boundary: $x = 0.310$

AR	Sample No. 1	Sample No. 2
X	0.3189	0.3196
Y	0.3207	0.3214

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.



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

UN R148
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

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Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.



UN R148 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. **Applicable / Not Applicable**

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 and conform / Not Applicable**

UN R148 4.3.2 In the case of light source modules **Applicable / Not Applicable**

UN R148 4.3.2.1 The design of the light source module(s) is such as: **Conform / Not Conform**

(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.

UN R148 4.3.2.2 The light source module(s) is tamperproof. **Conform / Not Conform**

UN R148 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**

UN R148 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**

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

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

Specific requirements applicability

<i>UN R148 Lamps and their categories</i>	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
Reversing lamp (Symbol AR)	Par. 5.8	4.4	Yes

4.1 Rear position lamps (symbol R1)

Applicable / ~~Not Applicable~~

UN R148 The light emitted by each of the two lamps supplied meets the
5.2.1 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	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]	[8-5]	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 Outside the reference axis and within the angular fields defined in the
5.2.2 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, normal mode, 44*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	0.80	17.00	7.21	7.48	Complies
2	5R	10U	0.80	17.00	7.81	8.10	Complies
3	20R	5U	0.40	17.00	5.41	5.61	Complies
4	10R	5U	0.80	17.00	7.52	7.80	Complies
5	H	5U	2.80	17.00	9.88	10.25	Complies
6	10L	5U	0.80	17.00	6.87	7.13	Complies
7	20L	5U	0.40	17.00	4.92	5.10	Complies
8	10L	V	1.40	17.00	7.68	7.97	Complies
9	5L	V	3.60	17.00	10.14	10.52	Complies
10	H	V	4.00	17.00	11.21	11.63	Complies
11	5R	V	3.60	17.00	10.47	10.86	Complies
12	10R	V	1.40	17.00	8.92	9.25	Complies
13	20R	5D	0.40	17.00	5.16	5.35	Complies
14	10R	5D	0.80	17.00	8.29	8.60	Complies
15	H	5D	2.80	17.00	10.66	11.06	Complies
16	10L	5D	0.80	17.00	9.15	9.49	Complies
17	20L	5D	0.40	17.00	5.56	5.77	Complies
18	5L	10D	0.80	17.00	8.96	9.30	Complies
19	5R	10D	0.80	17.00	9.01	9.35	Complies
20	All Directions Min.		0.05	--	0.22	0.23	Complies
21	All Directions Max.		--	17.00	11.53	11.96	Complies

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 2, normal mode, 44*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	0.80	17.00	7.29	7.61	Complies
2	5R	10U	0.80	17.00	6.36	6.64	Complies
3	20R	5U	0.40	17.00	5.23	5.46	Complies
4	10R	5U	0.80	17.00	6.86	7.17	Complies
5	H	5U	2.80	17.00	9.58	10.01	Complies
6	10L	5U	0.80	17.00	7.33	7.66	Complies
7	20L	5U	0.40	17.00	5.89	6.15	Complies
8	10L	V	1.40	17.00	7.32	7.65	Complies
9	5L	V	3.60	17.00	9.98	10.42	Complies
10	H	V	4.00	17.00	10.77	11.25	Complies
11	5R	V	3.60	17.00	9.41	9.83	Complies
12	10R	V	1.40	17.00	7.06	7.37	Complies
13	20R	5D	0.40	17.00	5.64	5.89	Complies
14	10R	5D	0.80	17.00	8.44	8.82	Complies
15	H	5D	2.80	17.00	9.96	10.40	Complies
16	10L	5D	0.80	17.00	8.14	8.50	Complies
17	20L	5D	0.40	17.00	5.25	5.48	Complies
18	5L	10D	0.80	17.00	8.71	9.10	Complies
19	5R	10D	0.80	17.00	8.22	8.59	Complies
20	All Directions Min.		0.05	--	0.26	0.27	Complies
21	All Directions Max.		--	17.00	11.22	11.72	Complies

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 1, failed mode, 42*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	0.80	17.00	6.83	7.06	Complies
2	5R	10U	0.80	17.00	7.44	7.69	Complies
3	20R	5U	0.40	17.00	5.10	5.27	Complies
4	10R	5U	0.80	17.00	7.12	7.36	Complies
5	H	5U	2.80	17.00	9.36	9.67	Complies
6	10L	5U	0.80	17.00	6.48	6.69	Complies
7	20L	5U	0.40	17.00	4.63	4.78	Complies
8	10L	V	1.40	17.00	7.26	7.50	Complies
9	5L	V	3.60	17.00	9.64	9.96	Complies
10	H	V	4.00	17.00	10.57	10.92	Complies
11	5R	V	3.60	17.00	9.94	10.27	Complies
12	10R	V	1.40	17.00	8.46	8.74	Complies
13	20R	5D	0.40	17.00	4.91	5.07	Complies
14	10R	5D	0.80	17.00	7.87	8.13	Complies
15	H	5D	2.80	17.00	10.12	10.46	Complies
16	10L	5D	0.80	17.00	8.67	8.96	Complies
17	20L	5D	0.40	17.00	5.26	5.43	Complies
18	5L	10D	0.80	17.00	8.49	8.77	Complies
19	5R	10D	0.80	17.00	8.55	8.83	Complies
20	All Directions Min.		0.05	--	0.21	0.22	Complies
21	All Directions Max.		--	17.00	10.98	11.34	Complies

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 2, failed mode, 42*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	0.80	17.00	6.84	7.11	Complies
2	5R	10U	0.80	17.00	6.04	6.28	Complies
3	20R	5U	0.40	17.00	4.96	5.15	Complies
4	10R	5U	0.80	17.00	6.51	6.76	Complies
5	H	5U	2.80	17.00	9.07	9.42	Complies
6	10L	5U	0.80	17.00	6.95	7.22	Complies
7	20L	5U	0.40	17.00	5.60	5.82	Complies
8	10L	V	1.40	17.00	6.95	7.22	Complies
9	5L	V	3.60	17.00	9.47	9.84	Complies
10	H	V	4.00	17.00	10.22	10.62	Complies
11	5R	V	3.60	17.00	8.95	9.30	Complies
12	10R	V	1.40	17.00	6.71	6.97	Complies
13	20R	5D	0.40	17.00	5.33	5.54	Complies
14	10R	5D	0.80	17.00	8.00	8.31	Complies
15	H	5D	2.80	17.00	9.45	9.82	Complies
16	10L	5D	0.80	17.00	7.71	8.01	Complies
17	20L	5D	0.40	17.00	4.99	5.19	Complies
18	5L	10D	0.80	17.00	8.23	8.55	Complies
19	5R	10D	0.80	17.00	7.78	8.08	Complies
20	All Directions Min.		0.05	--	0.25	0.26	Complies
21	All Directions Max.		--	17.00	10.68	11.10	Complies

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 MS 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, normal mode, 44*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	12.00	260.00	26.72	27.88	Complies
2	5R	10U	12.00	260.00	25.85	26.97	Complies
3	20R	5U	6.00	260.00	24.88	25.96	Complies
4	10R	5U	12.00	260.00	42.14	43.97	Complies
5	H	5U	42.00	260.00	50.30	52.48	Complies
6	10L	5U	12.00	260.00	45.17	47.13	Complies
7	20L	5U	6.00	260.00	26.89	28.06	Complies
8	10L	V	21.00	260.00	45.37	47.34	Complies
9	5L	V	54.00	260.00	64.57	67.37	Complies
10	H	V	60.00	260.00	72.23	75.36	Complies
11	5R	V	54.00	260.00	62.70	65.42	Complies
12	10R	V	21.00	260.00	42.36	44.20	Complies
13	20R	5D	6.00	260.00	24.64	25.71	Complies
14	10R	5D	12.00	260.00	41.32	43.11	Complies
15	H	5D	42.00	260.00	52.63	54.91	Complies
16	10L	5D	12.00	260.00	43.23	45.10	Complies
17	20L	5D	6.00	260.00	24.30	25.35	Complies
18	5L	10D	12.00	260.00	24.65	25.72	Complies
19	5R	10D	12.00	260.00	23.79	24.82	Complies
20	All Directions Min.		0.30	--	2.24	2.34	Complies
21	All Directions Max.		--	260.00	74.50	77.73	Complies

Sample No. 2, normal mode, 44*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	12.00	260.00	25.72	27.11	Complies
2	5R	10U	12.00	260.00	27.89	29.40	Complies
3	20R	5U	6.00	260.00	25.26	26.63	Complies
4	10R	5U	12.00	260.00	45.96	48.45	Complies
5	H	5U	42.00	260.00	51.72	54.52	Complies
6	10L	5U	12.00	260.00	44.25	46.65	Complies
7	20L	5U	6.00	260.00	24.74	26.08	Complies
8	10L	V	21.00	260.00	43.73	46.10	Complies
9	5L	V	54.00	260.00	65.98	69.56	Complies
10	H	V	60.00	260.00	73.26	77.23	Complies
11	5R	V	54.00	260.00	66.61	70.22	Complies
12	10R	V	21.00	260.00	45.22	47.67	Complies
13	20R	5D	6.00	260.00	25.54	26.92	Complies
14	10R	5D	12.00	260.00	45.36	47.82	Complies
15	H	5D	42.00	260.00	53.26	56.15	Complies
16	10L	5D	12.00	260.00	44.41	46.82	Complies
17	20L	5D	6.00	260.00	25.28	26.65	Complies
18	5L	10D	12.00	260.00	24.74	26.08	Complies
19	5R	10D	12.00	260.00	25.72	27.11	Complies
20	All Directions Min.		0.30	--	2.20	2.32	Complies
21	All Directions Max.		--	260.00	76.45	80.59	Complies

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 1, failed mode, 42*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	12.00	260.00	25.57	26.48	Complies
2	5R	10U	12.00	260.00	24.51	25.38	Complies
3	20R	5U	6.00	260.00	23.76	24.60	Complies
4	10R	5U	12.00	260.00	40.65	42.09	Complies
5	H	5U	42.00	260.00	48.09	49.80	Complies
6	10L	5U	12.00	260.00	43.64	45.19	Complies
7	20L	5U	6.00	260.00	25.54	26.45	Complies
8	10L	V	21.00	260.00	43.77	45.33	Complies
9	5L	V	54.00	260.00	61.12	63.29	Complies
10	H	V	60.00	260.00	68.93	71.38	Complies
11	5R	V	54.00	260.00	59.59	61.71	Complies
12	10R	V	21.00	260.00	40.75	42.20	Complies
13	20R	5D	6.00	260.00	23.51	24.35	Complies
14	10R	5D	12.00	260.00	39.78	41.19	Complies
15	H	5D	42.00	260.00	49.57	51.33	Complies
16	10L	5D	12.00	260.00	41.53	43.01	Complies
17	20L	5D	6.00	260.00	23.02	23.84	Complies
18	5L	10D	12.00	260.00	23.47	24.30	Complies
19	5R	10D	12.00	260.00	22.52	23.32	Complies
20	All Directions Min.		0.30	--	2.13	2.21	Complies
21	All Directions Max.		--	260.00	70.84	73.36	Complies

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 2, failed mode, 42*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	12.00	260.00	24.73	25.97	Complies
2	5R	10U	12.00	260.00	26.54	27.87	Complies
3	20R	5U	6.00	260.00	24.05	25.26	Complies
4	10R	5U	12.00	260.00	43.20	45.37	Complies
5	H	5U	42.00	260.00	49.31	51.79	Complies
6	10L	5U	12.00	260.00	42.39	44.52	Complies
7	20L	5U	6.00	260.00	23.49	24.67	Complies
8	10L	V	21.00	260.00	41.08	43.14	Complies
9	5L	V	54.00	260.00	62.93	66.09	Complies
10	H	V	60.00	260.00	69.72	73.22	Complies
11	5R	V	54.00	260.00	63.49	66.68	Complies
12	10R	V	21.00	260.00	42.56	44.70	Complies
13	20R	5D	6.00	260.00	24.26	25.48	Complies
14	10R	5D	12.00	260.00	43.11	45.27	Complies
15	H	5D	42.00	260.00	50.70	53.25	Complies
16	10L	5D	12.00	260.00	42.08	44.19	Complies
17	20L	5D	6.00	260.00	24.05	25.26	Complies
18	5L	10D	12.00	260.00	23.50	24.68	Complies
19	5R	10D	12.00	260.00	24.41	25.64	Complies
20	All Directions Min.		0.30	--	2.08	2.18	Complies
21	All Directions Max.		--	260.00	73.47	77.16	Complies

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

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	--	6.40	7.44	Complies
2	V	5U	5.00	--	5.89	6.22	Complies
3	10L	5U	5.00	--	7.37	6.79	Complies
4	10L	H	5.00	--	6.73	6.82	Complies
5	5L	H	5.00	--	7.19	7.48	Complies
6	V	H	5.00	--	7.30	7.68	Complies
7	5R	H	5.00	--	6.86	7.90	Complies
8	10R	H	5.00	--	5.53	7.20	Complies
9	10R	5D	5.00	--	5.86	6.23	Complies
10	V	5D	5.00	--	5.81	6.20	Complies
11	10L	5D	5.00	--	5.54	6.28	Complies

4.3 Direction-indicator lamps (Symbol 2a)**Applicable / ~~Not Applicable~~**

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

5.6.1

(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 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;

5.6.4

Applicable and Conform / Not Applicable

UN R148 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;

5.6.5

Conform / ~~Not Conform~~

Photometric test results

Sample No. 1, normal mode, 22*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	10.00	500.00	30.73	32.47	Complies
2	5R	10U	10.00	500.00	29.92	31.61	Complies
3	20R	5U	5.00	500.00	14.16	14.96	Complies
4	10R	5U	10.00	500.00	28.00	29.58	Complies
5	V	5U	35.00	500.00	45.01	47.56	Complies
6	10L	5U	10.00	500.00	32.11	33.93	Complies
7	20L	5U	5.00	500.00	15.63	16.51	Complies
8	10L	H	17.50	500.00	30.90	32.65	Complies
9	5L	H	45.00	500.00	57.37	60.62	Complies
10	H	V	50.00	500.00	62.36	65.89	Complies
11	5R	H	45.00	500.00	56.31	59.50	Complies
12	10R	H	17.50	500.00	28.22	29.82	Complies
13	20R	5D	5.00	500.00	12.87	13.60	Complies
14	10R	5D	10.00	500.00	25.57	27.02	Complies
15	V	5D	35.00	500.00	43.38	45.84	Complies
16	10L	5D	10.00	500.00	27.79	29.36	Complies
17	20L	5D	5.00	500.00	13.71	14.49	Complies
18	5L	10D	10.00	500.00	26.76	28.27	Complies
19	5R	10D	10.00	500.00	25.40	26.84	Complies
20	All Directions Min		0.30	--	1.12	1.18	Complies
21	All Directions Max		--	500.00	65.34	69.04	Complies

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 2, normal mode, 22*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	10.00	500.00	29.19	30.92	Complies
2	5R	10U	10.00	500.00	30.55	32.36	Complies
3	20R	5U	5.00	500.00	18.32	19.41	Complies
4	10R	5U	10.00	500.00	28.98	30.70	Complies
5	V	5U	35.00	500.00	47.71	50.54	Complies
6	10L	5U	10.00	500.00	27.20	28.81	Complies
7	20L	5U	5.00	500.00	13.53	14.33	Complies
8	10L	H	17.50	500.00	28.66	30.36	Complies
9	5L	H	45.00	500.00	57.83	61.26	Complies
10	H	V	50.00	500.00	64.15	67.95	Complies
11	5R	H	45.00	500.00	59.63	63.16	Complies
12	10R	H	17.50	500.00	28.84	30.55	Complies
13	20R	5D	5.00	500.00	15.04	15.93	Complies
14	10R	5D	10.00	500.00	27.87	29.52	Complies
15	V	5D	35.00	500.00	45.71	48.42	Complies
16	10L	5D	10.00	500.00	26.09	27.64	Complies
17	20L	5D	5.00	500.00	11.29	11.96	Complies
18	5L	10D	10.00	500.00	24.69	26.15	Complies
19	5R	10D	10.00	500.00	25.79	27.32	Complies
20	All Directions Min		0.30	--	1.06	1.12	Complies
21	All Directions Max		--	500.00	64.79	68.63	Complies

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 1, failed mode, 20*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	10.00	500.00	27.55	28.91	Complies
2	5R	10U	10.00	500.00	26.13	27.42	Complies
3	20R	5U	5.00	500.00	12.83	13.46	Complies
4	10R	5U	10.00	500.00	25.85	27.13	Complies
5	V	5U	35.00	500.00	40.31	42.30	Complies
6	10L	5U	10.00	500.00	28.79	30.21	Complies
7	20L	5U	5.00	500.00	14.49	15.20	Complies
8	10L	H	17.50	500.00	27.41	28.76	Complies
9	5L	H	45.00	500.00	52.13	54.70	Complies
10	H	V	50.00	500.00	56.35	59.13	Complies
11	5R	H	45.00	500.00	51.53	54.07	Complies
12	10R	H	17.50	500.00	25.79	27.06	Complies
13	20R	5D	5.00	500.00	11.63	12.20	Complies
14	10R	5D	10.00	500.00	22.92	24.05	Complies
15	V	5D	35.00	500.00	39.13	41.06	Complies
16	10L	5D	10.00	500.00	24.78	26.00	Complies
17	20L	5D	5.00	500.00	12.48	13.10	Complies
18	5L	10D	10.00	500.00	23.95	25.13	Complies
19	5R	10D	10.00	500.00	23.01	24.15	Complies
20	All Directions Min		0.30	--	0.93	0.98	Complies
21	All Directions Max		--	500.00	58.62	61.51	Complies

Inspection Report No.: ATS-SM-IR-148-14578

Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 2, failed mode, 20*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	After 30 min	After 1 min	
1	5L	10U	10.00	500.00	26.23	27.33	Complies
2	5R	10U	10.00	500.00	27.43	28.59	Complies
3	20R	5U	5.00	500.00	16.23	16.91	Complies
4	10R	5U	10.00	500.00	25.99	27.08	Complies
5	V	5U	35.00	500.00	42.75	44.55	Complies
6	10L	5U	10.00	500.00	24.64	25.68	Complies
7	20L	5U	5.00	500.00	12.26	12.78	Complies
8	10L	H	17.50	500.00	25.75	26.83	Complies
9	5L	H	45.00	500.00	52.70	54.92	Complies
10	H	V	50.00	500.00	57.69	60.12	Complies
11	5R	H	45.00	500.00	53.92	56.19	Complies
12	10R	H	17.50	500.00	26.28	27.39	Complies
13	20R	5D	5.00	500.00	13.65	14.22	Complies
14	10R	5D	10.00	500.00	25.22	26.28	Complies
15	V	5D	35.00	500.00	41.47	43.22	Complies
16	10L	5D	10.00	500.00	23.56	24.55	Complies
17	20L	5D	5.00	500.00	10.19	10.62	Complies
18	5L	10D	10.00	500.00	21.98	22.91	Complies
19	5R	10D	10.00	500.00	23.52	24.51	Complies
20	All Directions Min		0.30	--	0.97	1.01	Complies
21	All Directions Max		--	500.00	59.03	61.52	Complies

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

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 Reversing lamps (Symbol AR)**Applicable / ~~Not Applicable~~**

UN R148 The light emitted by each of the two lamps supplied meets the requirements in Table below:

Applicable and Conform / ~~Not Applicable~~

5.7.1

	Minimum luminous intensity in H-V (values in cd)	Maximum luminous intensity in any direction (values in cd)		
		in or above the h plane	below the h plane, down to 5°D	below 5°D
Reversing lamps	80	300	600	8000

UN R148 In every other direction of measurement shown in paragraph 2.5. of Annex 3, the luminous intensity shall be not less than the minima specified in that annex.

Conform / ~~Not Conform~~

5.8.2

However, in the case where the reversing lamp is intended to be installed on a vehicle exclusively in a pair of devices, the photometric intensity may be verified only up to an angle of 30° inwards where a photometric value of at least 25 cd shall be satisfied.

This condition shall be clearly explained in the application for approval and relating documents.

Applicable and Conform / ~~Not Applicable~~

Moreover, in the case where the type approval will be granted applying the condition above, a statement in paragraph 9.1.3. of the communication form (see Annex 1) will inform that the device shall only be installed in a pair.

Applicable and Conform / ~~Not Applicable~~

UN R148 The colour of the light emitted shall be white.

Conform / ~~Not Conform~~

5.8.3

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Photometric test results

Sample No. 1, normal mode, 3*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]			Conclusion
			Min.	Max.	After Stability	After 10 min	After 1 min	
1	10L	10U	10.00	300.00	42.51	43.67	45.12	Complies
2	V	10U	15.00	300.00	50.18	51.55	53.26	Complies
3	10R	10U	10.00	300.00	61.80	63.49	65.60	Complies
4	45R	5U	15.00	300.00	37.28	38.30	39.57	Complies
5	10R	5U	20.00	300.00	130.01	133.56	138.00	Complies
6	V	5U	25.00	300.00	128.16	131.66	136.03	Complies
7	10L	5U	20.00	300.00	90.95	93.43	96.54	Complies
8	30L	H	25.00	300.00	48.40	49.72	51.37	Complies
9	10L	H	50.00	300.00	98.58	101.27	104.63	Complies
10	V	H	80.00	300.00	131.23	134.81	139.29	Complies
11	10R	H	50.00	300.00	126.82	130.28	134.61	Complies
12	30R	H	25.00	300.00	64.69	66.45	68.66	Complies
13	45R	H	15.00	300.00	28.31	29.08	30.05	Complies
14	45R	5D	15.00	600.00	26.80	27.53	28.45	Complies
15	30R	5D	25.00	600.00	47.20	48.49	50.10	Complies
16	10R	5D	50.00	600.00	83.76	86.05	88.90	Complies
17	V	5D	80.00	600.00	91.91	94.42	97.56	Complies
18	10L	5D	50.00	600.00	77.33	79.44	82.08	Complies
19	30L	5D	25.00	600.00	46.46	47.73	49.31	Complies
20	Below 5D		--	8000.00	142.09	145.97	150.82	Complies
21	Above HH line		--	300.00	140.65	144.49	149.29	Complies
22	Down H line Above 5D		--	600.00	94.32	96.89	100.11	Complies

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Sample No. 2, normal mode, 3*LEDs lit together

Tested voltage: 13.5V

No.	Point of the measurement		Limits [cd]		Measured values [cd]			Conclusion
			Min.	Max.	After Stability	After 10 min	After 1 min	
1	10L	10U	10.00	300.00	43.01	44.41	46.45	Complies
2	V	10U	15.00	300.00	39.64	40.93	42.81	Complies
3	10R	10U	10.00	300.00	30.42	31.41	32.85	Complies
4	10R	5U	20.00	300.00	55.78	57.59	60.24	Complies
5	V	5U	25.00	300.00	79.07	81.64	85.39	Complies
6	10L	5U	20.00	300.00	92.41	95.41	99.80	Complies
7	45L	5U	15.00	300.00	35.37	36.52	38.20	Complies
8	45L	H	15.00	300.00	35.59	36.75	38.44	Complies
9	30L	H	25.00	300.00	72.31	74.66	78.09	Complies
10	10L	H	50.00	300.00	122.96	126.96	132.79	Complies
11	V	H	80.00	300.00	114.80	118.53	123.98	Complies
12	10R	H	50.00	300.00	81.97	84.63	88.52	Complies
13	30R	H	25.00	300.00	44.30	45.74	47.84	Complies
14	30R	5D	25.00	600.00	41.04	42.37	44.32	Complies
15	10R	5D	50.00	600.00	75.21	77.65	81.22	Complies
16	V	5D	80.00	600.00	99.12	102.34	107.05	Complies
17	10L	5D	50.00	600.00	105.20	108.62	113.61	Complies
18	30L	5D	25.00	600.00	60.58	62.55	65.42	Complies
19	45L	5D	15.00	600.00	30.62	31.61	33.07	Complies
20	Below 5D		--	8000.00	140.78	145.35	152.04	Complies
21	Above HH line		--	300.00	134.67	139.05	145.44	Complies
22	Down H line Above 5D		--	600.00	107.62	111.12	116.23	Complies

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

5. Other information

Place of inspection: Jiangsu Huachen Vehicle Inspection Co., Ltd.
Xihuan Road, Xinqiao, Danbei, Danyang, Jiangsu, China

Date of inspection: 15/08/2024

	Senior Inspector	Junior Inspector (if applicable)
Technical service representative(s):	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

DY-MX5-2401-S-00
04/08/2024

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Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

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 17025:2005 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 32.


The test results relates only to the product tested.

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

Dogana, Repubblica di San Marino, 27/08/2024

Number of project and protocol	Originality Check (*)	Automotive Technical Service S.r.l. Inspector  (Ms. Li Dan)	
	 ATS-SM-PR-14578	Automotive Technical Service S.r.l. Deputy Technical Director  (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.

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Of:	27/08/2024	
Type:	DY-MX5-2401-S	
Manufacturer:	Guangzhou Chiku Car Lights Co., Ltd.	

Appendix 1

List of modifications	Applicable / Not Applicable	Appendix 1
-----------------------	-----------------------------	------------

More details for application of:	Date :
Correction of	: -
Modification of	: -
Addition of	: -
Deletion of	: -



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Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

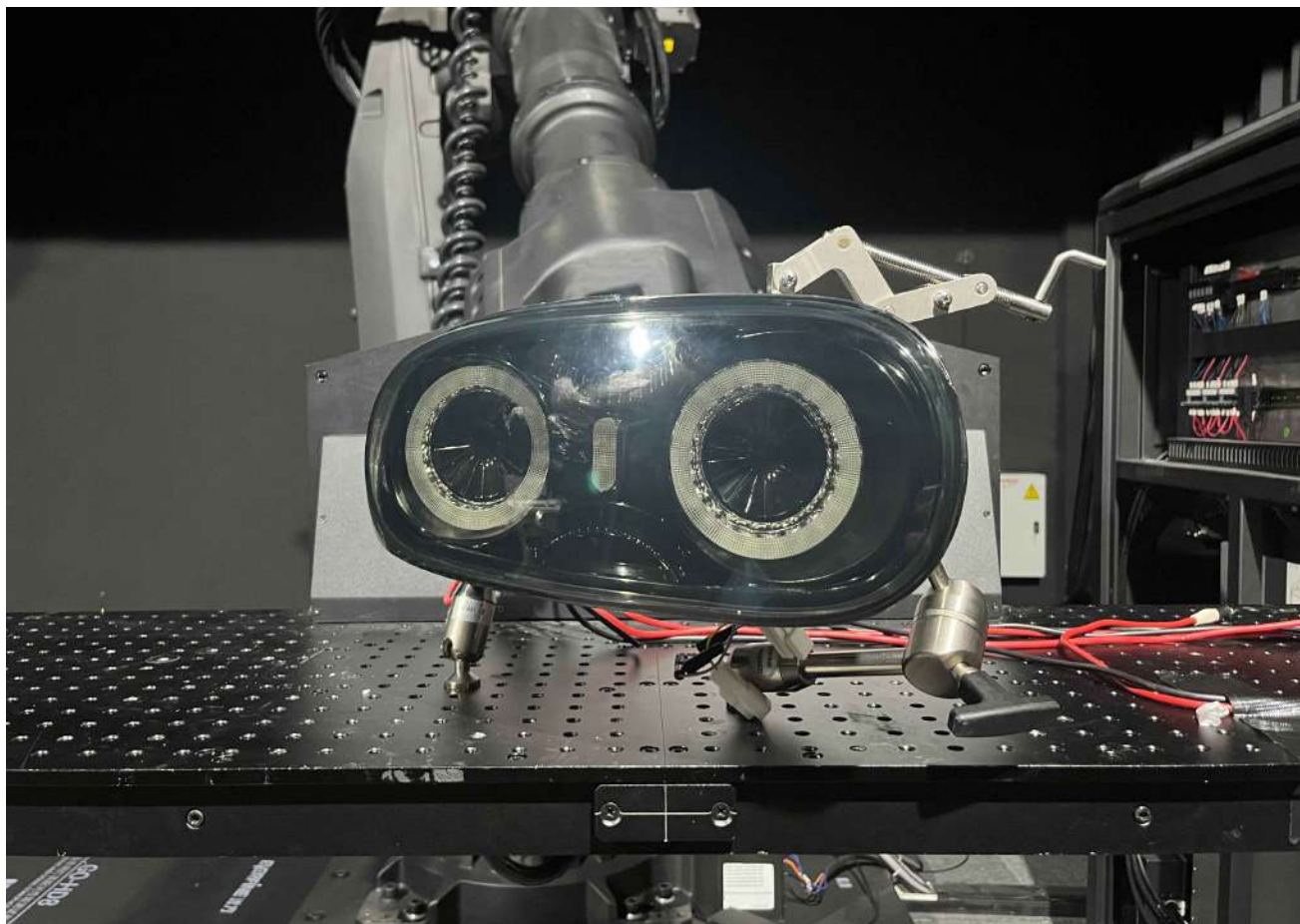


Appendix 2

Test Photo(s)

Applicable / ~~Not Applicable~~

Appendix 2



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Of: 27/08/2024



Type: DY-MX5-2401-S

Manufacturer: Guangzhou Chiku Car Lights Co., Ltd.

Appendix 3

List of main equipment

Applicable / ~~Not Applicable~~

Appendix 3

No.	Name	Type	Serial no.	Calibration due
1	Automotive and signal goniophotometer	GO-HD8	CHCML070	2025-03-29
2	High precision and fast spectral radiometer	HAAS-2000	CHCML038-1	2025-06-12

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



Guangzhou Chiku Car Lights Co., Ltd.
Area B, Floor 3, No.5 (Workshop 2) South Xinhe
Road, Baishui Village, Ningxi Street, Zengcheng
District, Guangzhou

August 4, 2024

Dear Sirs,

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

Function	ECE approval number
Rear direction indicator lamp	E57*148R00/05*XXXX*00
Stop lamp	E57*148R00/05*XXXX*00
Rear position lamp	E57*148R00/05*XXXX*00
Reversing lamp	E57*148R00/05*XXXX*00

Trade name or mark	:	
Type	:	DY-MX5-2401-S
Name and address of manufacturer	:	Guangzhou Chiku Car Lights Co., Ltd. Area B, Floor 3, No.5 (Workshop 2) South Xinhe Road, Baishui Village, Ningxi Street, Zengcheng District, Guangzhou

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




Guangzhou Chiku Car Lights Co., Ltd.

Information document No.: DY-MX5-2401-S-00

First application date : August 4, 2024

1. Specification data

Type		DY-MX5-2401-S			
Function		Rear group lamp			
		Rear direction indicator lamp	Stop lamp	Rear position lamp	Reversing lamp
Color		Amber	Red	Red	White
Rated	Voltage	12V	12V	12V	12V
	Wattage	7.5W	11.7W	2.8W	0.8W
Application Regulation ECE		R148.00 Cat.2a	R148.00 Cat.S1	R148.00 Cat.R1	R148.00 AR
Category of light source		22*LEDs	44*LEDs		3*LEDs
		Non-replaceable light source			
Location of marking	Voltage/Wattage	Marked on housing			
	Trade mark				
		Marked on housing			
	Approval mark	Marked on lens			

2. Construction and material

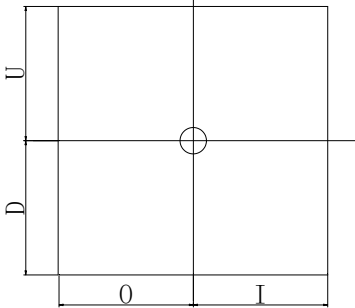
Construction	Material	Remarks
Lens	PMMA	Colour: Tawny
Housing	ABS	Colour: Black
Electrical Wiring	Copper covered with insulation	--

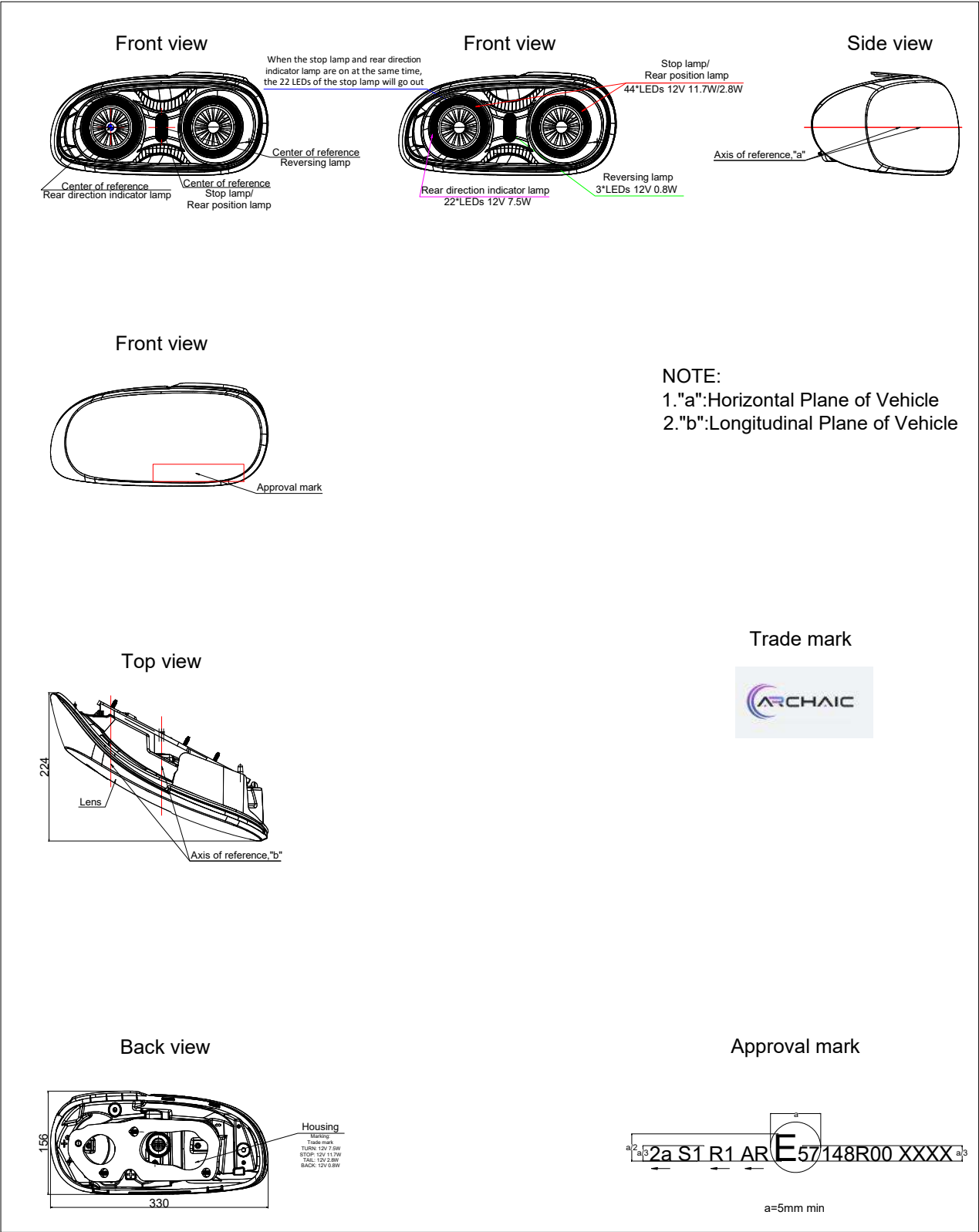
3. Name and address of manufacturer : Guangzhou Chiku Car Lights Co., Ltd.
Area B, Floor 3, No.5 (Workshop 2) South Xinhe Road, Baishui Village, Ningxi Street, Zengcheng District, Guangzhou

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

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

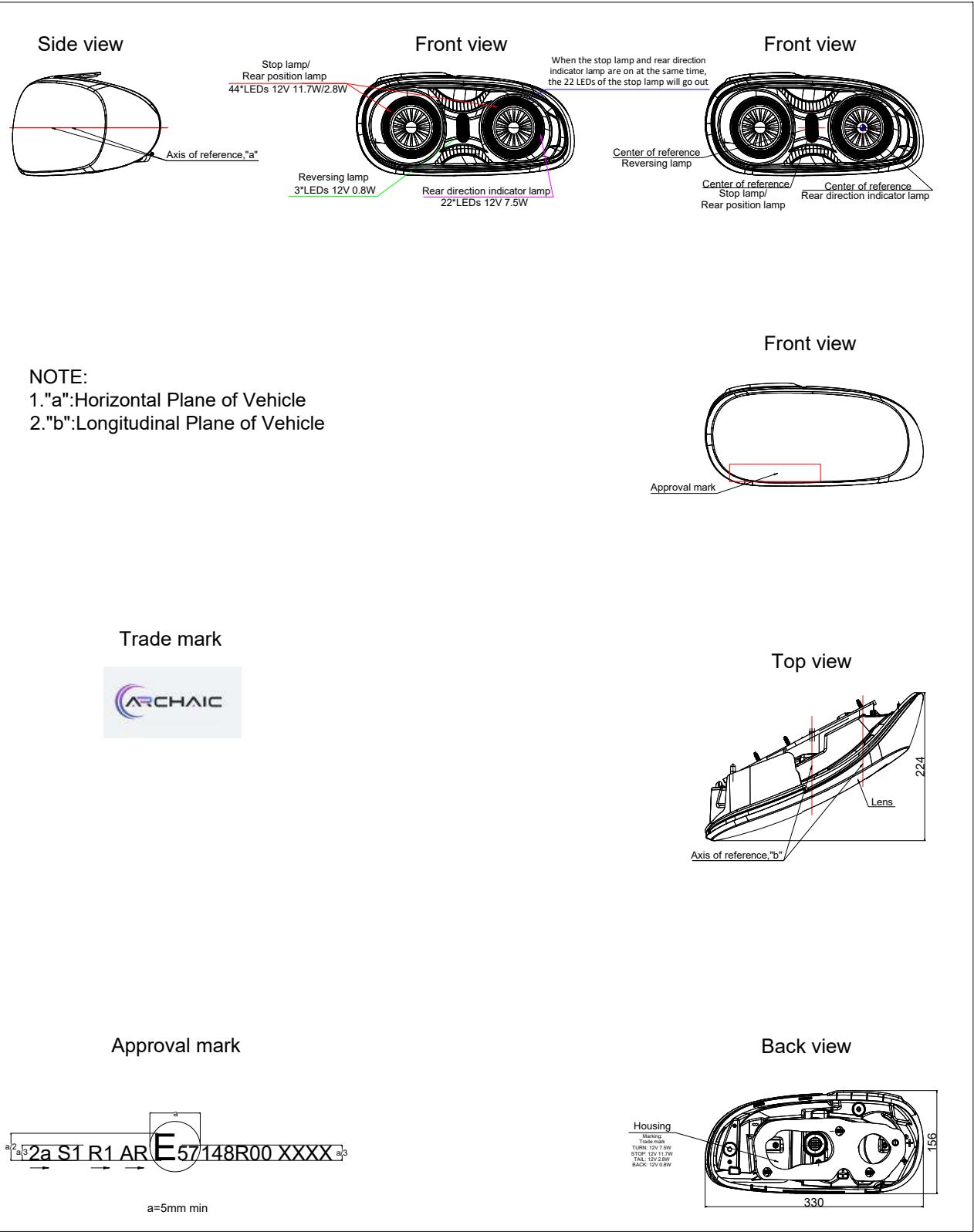
6: Apparent surface

<div><div>⊕ :Reference center</div><div></div><div>Unit: mm</div></div>				
Function	Limit (O)	Limit (I)	Limit (U)	Limit (D)
Rear direction indicator lamp	44	44	46	46
Stop lamp	121	123	47	46
Rear position lamp	121	123	47	46
Reversing lamp	7	7	19	19
--	--	--	--	--



XXXX means an approval number, please refer to the certificate.

General assembly drawing (Left side)



XXXX means an approval number, please refer to the certificate.

General assembly drawing (Right side)

Rear direction indicator lamp

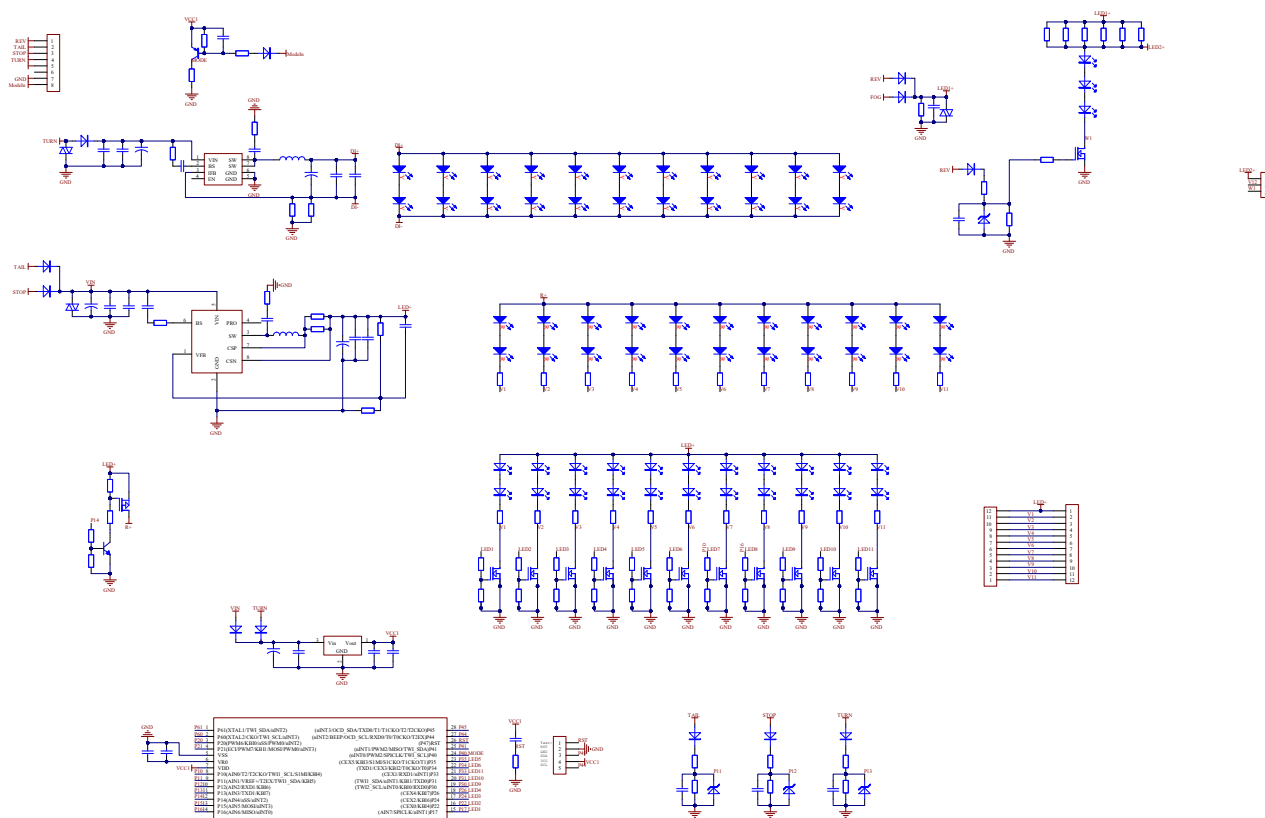
22*LEDs 12V 7.5W

Stop lamp/Rear position lamp

44*LEDs 12V 11.7W/2.8W

Reversing lamp

3*LEDs 12V 0.8W



Led circuit diagram