



GRAND-DUCHÉ DE LUXEMBOURG

Ministère du Développement durable
et des Infrastructures

Département des Transports

L-2938 Luxembourg

SOCIÉTÉ NATIONALE DE
CERTIFICATION ET D'HOMOLOGATION

s.à r.l.

Registre de Commerce: B 27180

L-5201 Sandweiler



Référence: E13*19R00*19R04*24394*00

Annexes: - Rapport technique
- Fiche de renseignements du constructeur

Sandweiler, le 17 février 2015

COMMUNICATION



concernant 2/: - **DELIVRANCE D'UNE HOMOLOGATION**
concerning 2/: APPROVAL GRANTED
- **EXTENSION D'HOMOLOGATION**
APPROVAL EXTENDED
- **REFUS D'HOMOLOGATION**
APPROVAL REFUSED
- **RETRAIT D'HOMOLOGATION**
APPROVAL WITHDRAWN
- **ARRET DEFINITIF DE LA PRODUCTION**
PRODUCTION DEFINITELY DISCONTINUED

d'un type de feu-brouillard avant en application du Règlement N° 19
of a type of front fog lamp pursuant to Regulation N° 19

Numéro d'homologation: E13*19R00*19R04*24394*00
Approval number:

Marque d'homologation: refer to manufacturer's information document
Approval mark:

- 1. Marque de fabrique ou de commerce du dispositif:** RG
Trade name or mark of the device:
- 2. Type de dispositif:** F3 front fog lamp
Type of the device:
- 3. Désignation du type de dispositif par le fabricant:** A0201
Manufacturer's name for the type of the device:
- 4. Nom et adresse du fabricant:** Foshan Ruiguang Auto Lighting & Electrical Co., Ltd.
Manufacturer's name and address:
2F, Block B, Tangtou Science
Industrial Park, Shishan Town,
Nanhai District, Foshan City,
Guangdong Province, P.R. China

5. **Nom et adresse du mandataire du fabricant (le cas échéant):** not applicable
If applicable, name and address of the manufacturer's representative:
6. **Dispositif soumis à l'homologation le:** 30.01.2015
Submitted for approval on:
7. **Autorité déléguée:** *Société Nationale de Certification et d'Homologation L-5201 Sandweiler*
Assigned authority:
- Service technique chargé des essais:** ATE EL s.à r.l.
Technical service responsible for conducting approval tests: 14, op Huefdreisch L-6871 Wecker
8. **Date du procès-verbal délivré par le service:** 08.02.2015
Date of report issued by that service:
9. **Numéro du procès-verbal délivré par ce service:** 65RGA0007A
Number of report issued by that service:
10. **Description sommaire:**
Brief description:
- 10.1 **Classe indiquée par le marquage pertinent 2/:** ~~B, B/, BPL, B/PL, F3, F3/, F3PL, F3/PL~~
Class as described by the relevant marking 2/:
- 10.2 **Nombre et catégorie(s) de lampe(s) à incandescence:** 4 LED's
Number and category(ies) of filament lamp(s):
- 10.3 **Module DEL 2/:** ~~oui~~ / non
LED module 2/: ~~yes~~ / no
- 10.4 **Générateur de lumière 2/:** ~~oui~~ / non
Light generator 2/: ~~yes~~ / no
- 10.5 **Code d'identification propre au module DEL ou au générateur de lumière:** not applicable
LED module or light generator specific identification code:
- 10.6 **Application du dispositif de régulation électronique des sources lumineuses 3/: 2/:** ~~oui~~ / non
Application of electronic light source control gear 3/: 2/: ~~yes~~ / no
- Alimentation de la source lumineuse:** not applicable
Supply to the light source:
- Caractéristiques du dispositif de régulation électronique des sources lumineuses:** not applicable
Specification of the light source control gear:
- Tension d'entrée:** not applicable
Input voltage:

	Dans le cas d'un dispositif de régulation électronique des sources lumineuses qui ne fait pas partie du feu: In the case of an electronic light source control gear not being part of the lamp:	not applicable
	Caractéristiques du signal de sortie: Output signal specification:	not applicable
10.7	Couleur de la lumière émise <u>2</u>: Colour of light emitted <u>2</u> :	blanc / jaune sélectif white / selectif yellow
10.8	Flux lumineux de la source lumineuse (voir par. 5.10) supérieur à 2000 lumen <u>2</u>: Luminous flux of the light source (see paragraph 5.10) greater than 2,000 lumen <u>2</u> :	oui / non yes / no
10.9	L'intensité lumineuse est variable <u>2</u>: Luminous intensity is variable <u>2</u> :	oui / non yes / no
10.10	Le gradient de la coupure (s'il a été mesuré) a été déterminé à <u>2</u>: The determination of the cut-off gradient (if measured) was carried out at <u>2</u> :	10 m / 25 m
11.	Position de la marque d'homologation: Position of the approval mark:	on the lens
12.	Motif(s) de l'extension d'homologation (le cas échéant): Reason(s) for extension (if applicable):	not applicable
13.	Homologation <u>2</u>: Approval <u>2</u> :	accordée / étendue / refusée / retirée granted / extended / refused / withdrawn

14. **Lieu:** Sandweiler
Place:
15. **Date:** 17 février 2015
Date:
16. **Signature:**
Signature:

Pour le Département des Transports



Marco FELTES
Inspecteur Principal 1^{er} en rang

Pour la SNCH



Claude LIESCH
Directeur



17. **Est annexée la liste des pièces constituant le dossier d'homologation déposé au Service administratif ayant délivré l'homologation et pouvant être obtenu sur demande.**
The list of documents deposited with the Administrative Service, which has granted approval, is annexed to this communication and may be obtained on request.

voir "INDEX DU DOSSIER D'HOMOLOGATION" ci-joint / see "INDEX TO TYPE-APPROVAL REPORT"

2/ Biffer les mentions qui ne conviennent pas/ Strike out what does not apply

3/ Pour les feux équipés de sources lumineuses non remplaçables, indiquer le nombre et la consommation totale en watt des sources lumineuses/ For lamps with non-replaceable light sources indicate the number and the total wattage of the light sources



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Sandweiler, le 17 février 2015

Index du dossier d'homologation

Index to type-approval report

	Numéro d'homologation: Approval number:	E13*19R00*19R04*24394*00
	Révision: Revision:	00
	Marque de fabrique ou de commerce: Trade name or mark:	RG
	Type: Type:	A0201
1.	Procès-verbal d'essai: Test report:	N° 65RGA0007A
	- Technical report:	Page(s) 1, 2
	- Index:	Annex(es) II - Page(s) 1
	- General test report:	Annex(es) T - Page(s) 1 to 5
	- General information:	Annex(es) GI1 - Page(s) 1, 2
2.	Dossier du constructeur: Report of the manufacturer:	N° A0201
	- Manufacturer's information document:	Page(s) 1, 2
3.	Autres documents annexés: Other documents annexed:	not applicable
4.	Date de délivrance de l'homologation initiale: Date of issue of initial type approval:	17.02.2015
5.	Date de la dernière délivrance de pages révisées: Date of last issue of revised pages:	not applicable
6.	Date de la dernière délivrance d'une homologation révisée: Date of last extension:	not applicable



Tests and inspection concerning

POWER-DRIVEN VEHICLE FRONT FOG LAMPS

according to the ECE Regulation No. 19 including all amendments
up to Series 04, Supplement 6 of 09.10.2014

Manufacturer: Foshan Ruiguang Auto Lighting & Electrical Co., Ltd.
2F, Block B, Tangtou Science
Industrial Park, Shishan Town,
Nanhai District, Foshan City,
Guangdong Province, P.R. China

Type: A0201

Type of Approval: ECE	Type Approval No.: E13*19R00*19R04*....*00	Manufacturer: Foshan Ruiguang Auto Lighting & Electrical Co., Ltd.
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Conclusion: The tests and checks carried out have shown the compliance of the type described in this report and the attached annexes with the Regulation mentioned above.

Wecker, 08.02.2015

p.o. Mengting Xu
Ingénieur Inspecteur

Index: see Annex I1



1 Tests and inspection results

Refer to Annex T

2 Type and variants

The tests and inspections carried out and described in this technical report have been selected in order to include the following variants and versions of the type and its equipments, as far as these are relevant for the topic of this report, into the judgement:

As stated in Annex MID (Manufacturer's Information Document):	Item
None.	

3 Remark

3.1 General

This report describes test results of the front fog lamp(Category F3).
The front fog lamp is grouped with daytime running lamp.
The daytime running lamp test report number is 65RGA0008A.



Compilation of Dossier No.: 65RGA0007

Extension 00

Technical Report no.: 65RGA0007A

page 1 and 2

Composition of Annex:

I1:	Index	page 1
T:	General Test Report	page 1 to 5
GI1:	General Information	page 1 to 2
MID:	Manufacturer's Information Document	page 1 to 3
	Index of the Manufacturer's Information Document:	
	Information Document	Page 1
	Drawings	Page 2 to 3



General Test Report

The data in this section refer only to the items submitted to testing or inspection.

0 Abstract

0.1 Type: A0201

1 Dates and resources

1.1 Date of receipt of test item: 29.01.2015

1.2 Date of test: 29.01.2015 - 30.01.2015

1.3 Place of test: SHANGHAI MOTOR VEHICLE INSPECTION CENTER(SMVIC);
Anting, Jiading District, Shanghai, China

1.4 Testing site and testing equipment:

All measuring and test equipment used to carry out the inspections are in accordance with ISO 17025 and the regulatory act(s) applied.

2 Test object

The tests were conducted with a test component which is representative of the component type to be approved.

Type: A0201

Description: Front fog lamp/Category F3
ID: Sample 1, Sample 2

3 Tests and inspections

3.1 General specifications

Markings: The trade name is marked clearly legible and indelible on the lens of the lamp.
The rated voltage and wattage is marked clearly legible and indelible on the housing of the lamp.
Space for the approval mark and for additional symbols is provided on the lens of the lamp.

Vibration endurance: The lamp is designed and constructed that in normal use despite the vibrations to which they may be subjected, their satisfactory operation is assured and they retain the required characteristics.

Adjusting device: Requirement fulfilled.

Replaceable filament lamp(s): Not applicable.



General Test Report

3.2 Test and performance requirements

3.2.1 LED or LED MODULES or light generator test

3.2.1.1 Red content of LED or LED MODULES

	Requirement	Sample 1
Red content k_{red}	≥ 0.05	0.08

3.2.1.2 UV-radiation of LED or LED MODULES

	Requirement	Sample 1
UV-radiation k_{uv}	$\leq 10^{-5}$ W/lm	0.95×10^{-7}

3.2.1.3 Temperature stability test of LED or LED MODULES

Photometric test result (cd)			
Test point	Value after 1 minute $I_{1 \text{ minute}}$	Value after Photometric stability $I_{\text{stabilization}}$	Ratio $I_{1 \text{ minute}}/I_{\text{stabilization}}$
0°H (Horizontal)- 2.5°D (Vertical)	7866.31	7310.00	1.08

3.2.1.4 Colormetric test of LED or LED MODULES

Trichromatic coordinates-reference axis	Value after 1 minute	Value after Photometric stability
x	0.436	0.434
y	0.396	0.393

The samples tested fulfil with the colorimetric specifications in regulation.

3.2.2 Colormetric test

Trichromatic coordinates-reference axis	Sample 1	Sample 2
x	0.434	0.433
y	0.393	0.393

The samples tested fulfil with the colorimetric specifications in regulation.

3.2.3 Photometric test

3.2.3.1 Measurement of the quality of cut-off

Cut-off measurement	Result
Measurement distance at 10m/25m	25 m
Not more than one cut-off line is visible.	Fulfilled
Sharpness of cut-off: $G > 0.08$	0.24
Linearity: at 3° left and right of V-V line do not deviate by more than $\pm 0.2^\circ$	Fulfilled



General Test Report

3.2.3.2 Luminous Intensity values measured after photometric stabilization

Luminous Intensity measured on screen(cd)			
Designated lines/zones	Required Luminous Intensity	Sample 1	Sample 2
Point 1	≤85	1.70	1.71
Point 2	≤85	5.02	5.04
Point 3	≤85	12.03	12.01
Point 4	≤85	27.45	27.62
Point 5	≤85	3.41	3.42
Point 6	≤85	14.06	14.02
Point 7	≤85	9.20	9.46
Point 8	≤85	20.74	21.05
Point 9	≤85	27.57	27.25
Point 10	≤85	19.82	20.08
Line 1	≤130	60.02	60.16
Line 2	≤150	97.18	97.71
Line 3	≤245	161.47	165.57
Line 4	≤360	220.08	225.66
Line 5	≤485	272.29	275.83
Line 6	≥2700	7310.00	7110.10
Maximum on line 6	--	7856.10	7677.00
Line 7	< 50% of maximum on line 6	272.30	275.41
Line 8L	≥1100	2918.50	3362.30
Line 8R	≥1100	2643.00	2918.20
Line 9L	≥450	488.02	536.31
Line 9R	≥450	957.50	844.80
Zone D	≤12000	8273.50	8277.80

Luminous Intensity measured on screen(cd)			
Designated lines/zones for test stability	Required Luminous Intensity	Sample 1	Sample 2
Line 5 – point H: 0°	≤485	272.29	275.83
Point I _{max} in Zone D	≤12000	8273.50	8277.80

Requirement	Result
No variations in homogeneity detrimental to satisfactory visibility in the zone above the line 5 from 10 degrees left to 10 degrees right.	Fulfilled
Inside the field between lines 1 to 5, the beam pattern is substantially uniform.	Fulfilled
No discontinuities in intensities detrimental to satisfactory visibility between the lines 6, 7, 8 and 9.	Fulfilled



General Test Report

Luminous Intensity values measured after after one minute(LED or LED MODULES)

Luminous Intensity measured on screen(cd)			
Designated lines/zones	Required Luminous Intensity	Sample 1	Sample 2
Point 1	≤85	1.83	1.84
Point 2	≤85	5.40	5.42
Point 3	≤85	12.95	12.92
Point 4	≤85	29.54	29.72
Point 5	≤85	3.67	3.68
Point 6	≤85	15.13	15.09
Point 7	≤85	9.90	10.18
Point 8	≤85	22.32	22.65
Point 9	≤85	29.67	29.32
Point 10	≤85	21.33	21.61
Line 1	≤130	64.59	64.74
Line 2	≤150	104.58	105.15
Line 3	≤245	173.76	178.17
Line 4	≤360	236.83	242.83
Line 5	≤485	293.01	296.82
Line 6	≥2700	7866.31	7651.20
Maximum on line 6	--	8453.97	8261.24
Line 7	< 50% of maximum on line 6	293.02	296.37
Line 8L	≥1100	3140.61	3618.18
Line 8R	≥1100	2844.14	3140.28
Line 9L	≥450	525.16	577.12
Line 9R	≥450	1030.37	909.09
Zone D	≤12000	8903.13	8907.76

3.2.3.3 Other photometric requirements

3.2.3.3.1 Front fog lamps equipped with gas-discharge light sources with the ballast not integrated with the light source
Not applicable.

3.2.3.3.2 Adaptative front fog lamps
Not applicable.

3.2.4 Tests for stability of photometric performance of front fog lamps

3.2.4.1 Clean front fog lamp
The front fog lamp has been operated for 12 hours in accordance with item 1.1.1 of Annex 5

3.2.4.1.1 Test results
The visual inspection after the test did not show any distortion, deformation, cracking or change in colour of either the lamp lens or the external lens.

Luminous Intensity measured on screen(cd)				
	Initial of test	End of test	Difference(%)	Allowable difference(%)
Line 5 – point H: 0°	272.29	265.62	2.45	10
Point lmax Zone D	8273.50	8102.13	2.07	10



General Test Report

3.2.4.2 Dirty front fog lamp
The front fog lamp has been prepared in accordance with item 1.2.1 of Annex 5.

3.2.4.2.1 Test results
The visual inspection after the test did not show any distortion, deformation, cracking or change in colour of either the lamp lens or the external lens.

Luminous Intensity measured on screen(cd)				
	Initial of test	End of test	Difference(%)	Allowable difference(%)
Line 5 – point H: 0°	265.62	252.41	4.97	10
Point lmax Zone D	8102.13	7682.22	5.18	10

3.2.4.3 Test for change in vertical position of the "cut-off" line under the influence of heat
The test procedure is in accordance with item 2.1 of Annex 5

3.2.4.3.1 Test results(Unit mrad)

	Sample 1	Sample 2	Maximum permissible
$\Delta r_1 = r_3 - r_{60} $	0.15	---	$\Delta r_1 \leq 2 \text{ mrad}$

3.2.5 Requirements for lamps incorporating lenses of plastic material - Testing of lens or material samples and of complete lamps
The lamp manufacturer can prove that the product has already passed the tests prescribed in item 2.1. to 2.5. of annex 6, those tests need not be repeated; only the tests prescribed in Appendix 1, table B, shall be mandatory.

3.2.5.1 Resistance to mechanical deterioration of the lens surface
The lens of lamp sample No. 1 shall be subjected to the test described in item 2.4.1. of Annex 6

3.2.5.1.1 Test results

Luminous Intensity measured on screen(cd)		
	Sample 1	Required Luminous Intensity
Line 2	88.63	≤ 195
Line 5	231.93	≤ 630.5

3.2.5.2 Test of adherence of coatings, if any
The lens of lamp sample No. 2 shall be subjected to the test described in item 2.5. of Annex 6.

3.2.5.2.1 Test results
After the test, there is no appreciable impairment of the gridded area. Impairments at the intersections between squares or at the edges of the cuts does not exceed 15 per cent of the gridded surface.



General Information

[]	Numbering according to annex 1 of the ECE Regulation No.19	
[1.]	Trade name or mark of the device:	RG
[2.]	Type of the device:	F3 front fog lamp
[3.]	Manufacturer's name for the type of device:	A0201
[4.]	Manufacturer's name and address:	Foshan Ruiguang Auto Lighting & Electrical Co., Ltd. 2F, Block B, Tangtou Science Industrial Park, Shishan Town, Nanhai District, Foshan City, Guangdong Province, P.R. China
[5.]	If applicable, name and address of Manufacturer's representative:	Not applicable
[6.]	Submitted for approval on:	30.01.2015
[7.]	Technical Service responsible for conducting approval tests:	ATE EL s.à r.l. 14, op Huefdreisch L-6871 Wecker
[8.]	Date of report issued by that service:	08.02.2015
[9.]	Number of report issued by that service:	65RGA0007A
[10.]	Concise description:	
[10.1.]	Category as described by the relevant marking: B, B/, BPL, B/PL, F3, F3/, F3PL, F3/PL	F3PL
[10.2.]	Number and category(ies) of filament lamp(s):	LEDs*4
[10.3.]	LED module: yes/no	No
[10.4.]	Light generator: yes/no	No
[10.5.]	LED module or light generator specific identification code:	Not applicable
[10.6.]	Application of electronic light source control gear: yes/no	No
	Supply to the light source:	Not applicable
	Specification of the light source control gear: Input voltage:	Not applicable
	In the case of an electronic light source control gear not being part of the lamp:	Not applicable
	Output signal specification:	Not applicable



General Information

[10.7.]	Colour of light emitted: white/selective yellow	White
[10.8.]	Luminous flux of the light source (see paragraph 5.10.)greater than 2,000 lumen: yes/no	No
[10.9.]	Luminous intensity is variable: yes/no	No
[10.10.]	The determination of the cut-off gradient (if measured)was carried out at 10m/25m:	25 m
[11.]	Position of the approval mark:	On the lens
[12.]	Reason(s) for extension (if applicable):	Not applicable
[13.]		
[14.]		
[15.]		
[16.]		
[17.]		

FOSHAN RUIGUANG AUTO LIGHTING&ELECTRICAL CO.,LTD.

First application date : January 08, 2015

Page 1 of 3

Information folder No. :

A0201-00

1. Specification data

Type		A0201	
Function		Front fog lamp	Daytime running lamp
Rated	Voltage	12V	12V
	Wattage	10W	12W
Applicable Regulation (ECE)		ECE R19.04 (Category F3)	ECE R87.00 (Category RL)
Location of marking	Light source	4LEDs, non-replaceable light source	4LEDs , non-replaceable light source
		Marked on Housing	
	Trade mark	RG	
		Marked on Lens	

2. Construction and material

Construction	Material	Remarks
Lens	Plastic(PC) Trade name: Makrolon AL2647 Manufacturer: Bayer Material Science Ltd.	Color: Clear Coating: Trade name: UVT 200 Q1 Manufacturer: Red Spot Paint & Varnish Co., Inc
Reflector	Plastic(PC)	---
Housing	Aluminum alloy	---

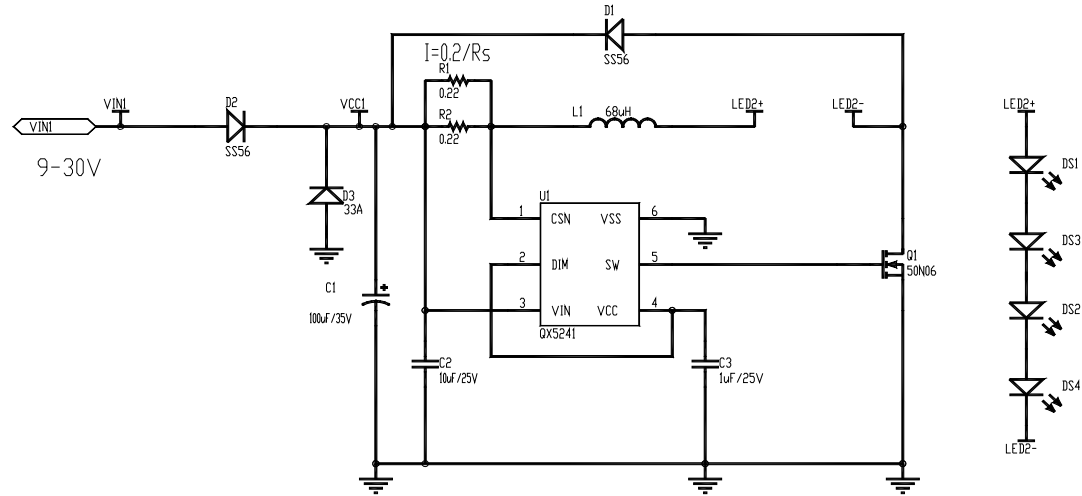
3. Name and address of manufacturer : FOSHAN RUIGUANG AUTO LIGHTING&ELECTRICAL CO.,LTD.
2F,Block B, Tangtou Science Industrial Park, Shishan Town, Nanhai District, Foshan City, Guangdong, P.R.China

4. Name and address of representative of manufacturer : Not applicable

This information document consists of 3 pages

The LED Circuit Diagram

Front fog lamp



Daytime running lamp

