

Index to the information package of a type approval with regard to a Regulation (UNECE) :

Last applicable Series of amendments	Base approval and update No	Extension No	Revision No	Issue date	Information document	
					Reference	Number of pages
R06-01	00	-	-	09.01.2018	SONAR SK3481(3482)-10312 / 00	8

Approved and to be attached to the approval certificate,



R. VERHELST

Updated Approval No:	E6*06R01/27*0378*00	BEVASYS :	201302503
Update No :	00	Issue date :	09.01.2018



Communication concerning :

- Approval granted ⁽¹⁾
- ~~Approval extended ⁽⁴⁾~~
- ~~Approval refused ⁽⁴⁾~~
- ~~Approval withdrawn ⁽⁴⁾~~
- ~~Production definitively discontinued ⁽⁴⁾~~

of a type of direction indicator, pursuant to Regulation No.06

Approval No : E6*06R01/27*0378*00

Extension No : -

Approval mark :

RL HCR A 1a
00 01 02 01
→ →



10 PL

0378

Left hand

1a A HCR RL
01 02 01 00
← ←



10 PL

0378

Right hand

1. Trade name or mark of device : SONAR
2. Manufacturer's name for the type of device : SK3481-10312 / SK3482-10312
3. Manufacturer's name and address : Sonar Auto Parts Co., Ltd.
No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.
4. If applicable, name and address of the manufacturer's representative : -
5. Submitted for approval on : 19.04.2017 ~ 17.05.2017
6. Technical Service responsible for conducting approval test: Vincotte N.V.
Jan Olieslagerslaan 35
1800 Vilvoorde
Belgium
7. Date of test report issued by that Service: 09.01.2018
8. Number of test report issued by that Service: H1760607082/112

9.	Concise description :	See information document
	Category :	1, 1a, 1b, 2a, 2b, 5, 6 ⁽¹⁾
	Number, category :	1 x PY21W
	Function(s) produced by an interdependent lamp forming part of an interdependent lamps system :	-
	Voltage and wattage :	12V, 21W
	Light source module specific identification code :	-
	Only for limited mounting height of equal to or less than 750mm above the ground :	Yes / No ⁽¹⁾
	Geometrical conditions of installation and relating variations, if any :	See information document
	Application of an electronic light source control gear / variable intensity control :	
	(a) Being part of the lamp :	Yes / No ⁽¹⁾
	(b) Being not part of the lamp :	Yes / No ⁽¹⁾
	Input voltage(s) supplied by an electronic light source control gear / variable intensity control :	-
	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) :	-
	Variable luminous intensity :	Yes / No ⁽¹⁾
	Sequential activation of light sources (see paragraph 5.6 of this Regulation) :	Yes / No ⁽¹⁾
10.	Position of approval mark :	On the lamp
11.	Reason(s) for extension (if applicable) :	-
12.	Approval granted / extended / refused / withdrawn ⁽¹⁾	

13. Place : Brussels
14. Date : 09.01.2018
15. Signature :

ON BEHALF OF THE SECRETARY-GENERAL:



R. VERHELST

16. The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained on request.

(1) *Delete where not applicable*



VINÇOTTE nv

Registered office: Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium

VAT BE 0462.513.222 • RPM/RPR Brussels • BNP Paribas Fortis: BE24 2100 4113 6338 • BIC: GEBABEBB

Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium • phone: +32 2 674 57 11 • brussels@vincotte.be

ISO/IEC 17020 Accredited inspection body - Accreditation certificate BELAC No. 016-INSP

1. **SUBJECT : DIRECTION INDICATORS**

R6-01

2. **REF. :** Report number : **H1760607082/112** No. of pages : 1 of 13 No. of annexes : -
Bevasys : 201302503 Approval No. : (0378 00) Update : 00

3. **GENERALITIES :**

Make of Device : SONAR

Commercial Type : -

Manufacturer's Type : SK3481-10312 / SK3482-10312

Name and address of the manufacturer :

Sonar Auto Parts Co., Ltd.

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

4. **TESTS :** Date and place : 2017.04.19 to 2017.05.17
SUN-JET VISIBLE LIGHT LABORATORY
Applied document(s) : SONAR SK3481(3482)-10312 / 00
Inspector : LU Wan-Ching
Persons witnessing the tests : LU Wan-Ching
Location of E-mark : On the lamp

5. **CONCLUSIONS :**

The tests were carried out according to the following specifications :

- UNECE Regulation No. 6 incorporating supplement 27 to the 01 series of amendments.

The models presented comply with the requirements to be applied.

Date : 2018.01.09

Signature :



2BH/LWC-DV

23A-AK

DESCRIPTION OF THE TESTED DIRECTION INDICATOR

Direction indicator lamp type : Front Direction Indicator
 Direction indicator lamp category : 1a
 Category and kind of light source(s) : PY21W
 Number of light source : 1
 Voltage and wattage : 12V, 21W

GENERAL SPECIFICATIONS

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
The requirements contained in sections 5. "General specifications" and 6. "Individual specifications" and in the Annexes referenced in the said sections of Regulations Nos. 48, 53, 74 or 86, and their series of amendments in force at the time of application for the lamp type approval shall apply to this Regulation.	5.		
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.			
Each device supplied shall conform to the specifications set forth in § 6 and § 8 below.	5.1.	X	
The devices must be so designed and constructed that under 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 this Regulation.	5.2.	X	
In the case of light source modules, it shall be checked that :	5.3.		X
The design of the light source module(s) shall be such as	5.3.1.		
(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 device, light source modules having different characteristics can not be interchanged within the same lamp housing			
The light source module(s) shall be tamperproof.	5.3.2.		
A light source module shall be so designed that regardless of the use of tool(s), it shall not be mechanically interchangeable with any replaceable approved light source	5.3.3		
In case of failure of the variable intensity control of a direction indicator of category 2b emitting more than the maximum value of category 2a, requirements of steady luminous intensity of category 2a shall be fulfilled automatically.	5.4		X
In the case of replaceable filament lamp(s) :	5.5.	X	
Any category or categories of light source(s) approved according to Regulation No. 37 and/or Regulation No. 128 may be used, provided that no restriction on the use is made in Regulation No. 37 and its series of amendments in force at the time of application for type approval or in Regulation No. 128 and its series of amendments in force at the time of application for type approval.	5.5.1.		
The design of the device shall be such that light source cannot be fixed in any other position but the correct one.	5.5.2.		
The light source holder shall conform to the characteristics given in IEC Publication 60061. The holder data sheet relevant to the category of light source used, applies.	5.5.3.		



SONAR AUTO PARTS CO., LTD.

Head Office:

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

Taipei Plant:

No.263, Yingtao Rd. Yingge District,
New Taipei City, Taiwan R.O.C

Tainan Plant:

No. 185, Sec. 1, Jhongshan Rd., Guiren District,
Tainan City, Taiwan, R.O.C.

COMBINATION HEADLAMP

SONAR SK3481-10312 / SK3482-10312 for Right Hand Traffic

Application: original

Date: March 13, 2013

Total number of pages: 8



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



Manufacturer name and address: Sonar Auto Parts Co., Ltd.

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

Trade name or mark : SONAR

Type of device : SK3481-10312 / SK3482-10312

SPECIFICATIONS**Function-Application-class category lamp and colour**

Trade name or mark	SONAR				
Function	Headlamp		Front Direction Indicator	Front ⁽¹⁾ Position Lamp	Daytime ⁽¹⁾ Running Lamp
	Driving Beam	Passing Beam			
ECE Regulation	112-01 Supplement 7	112-01 Supplement 7	6-01 Supplement 27	7-02 Supplement 26	87-00 Supplement 19
Class	B	B	-	-	-
Category	-	-	1a	A	-
Number, category and kind of lamp source(s)	1×H7	1×H7	1×PY21W	30LEDs / 1 light source	30LEDs / 1 light source
Voltage and wattage	12V, 55W	12V, 55W	12V, 21W	12V, 3W	12V, 13.5W
Lens	Outer	Clear	Clear	Clear	Clear
	Filter (Inner)	Clear	Clear	Clear	Clear
Colour of light emitted	White	White	Amber	White	White

⁽¹⁾ Front position lamp, which is reciprocally incorporated with daytime running lamp.

TECHNICAL DATA

Part	Material	Remark
Lens	Outer	PC (polycarbonate)
	Filter (Inner)	PC (polycarbonate)
	Filter (Inner) for passing beam and driving beam	Glass
Reflector	PBT+PET+M20% ⁽³⁾	Adjustable
Housing	PP + GF30%	-

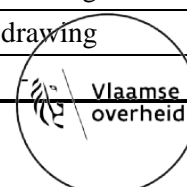
⁽²⁾ The base material of lens: Type number is LEXAN Resin LS2 from GE Advanced Materials.

The hard coating: Type number is UVT 2008 from Shiang Yuan.

⁽³⁾ There are two kinds of sub-reflectors, one is electroplate and the other is black.

MARKING

Marking	Location
Trade name or mark	SONAR
Approval marks	0378
LED module code	-



DRAWINGS	
Reference	Version
SK3481(3482) 10312-1	2017.05.08
SK3481(3482) 10312-2	2017.05.08
SK3481(3482) 10312-3	2017.05.08
SK3481(3482) 10312-4	2017.05.08
SK3481(3482) 10312-5	2017.05.08

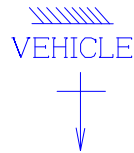
(Null below)



AUTOMOTIVE certification
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E-mail: homologation@vincotte.be
2018.01.09



DRIVING DIRECTION



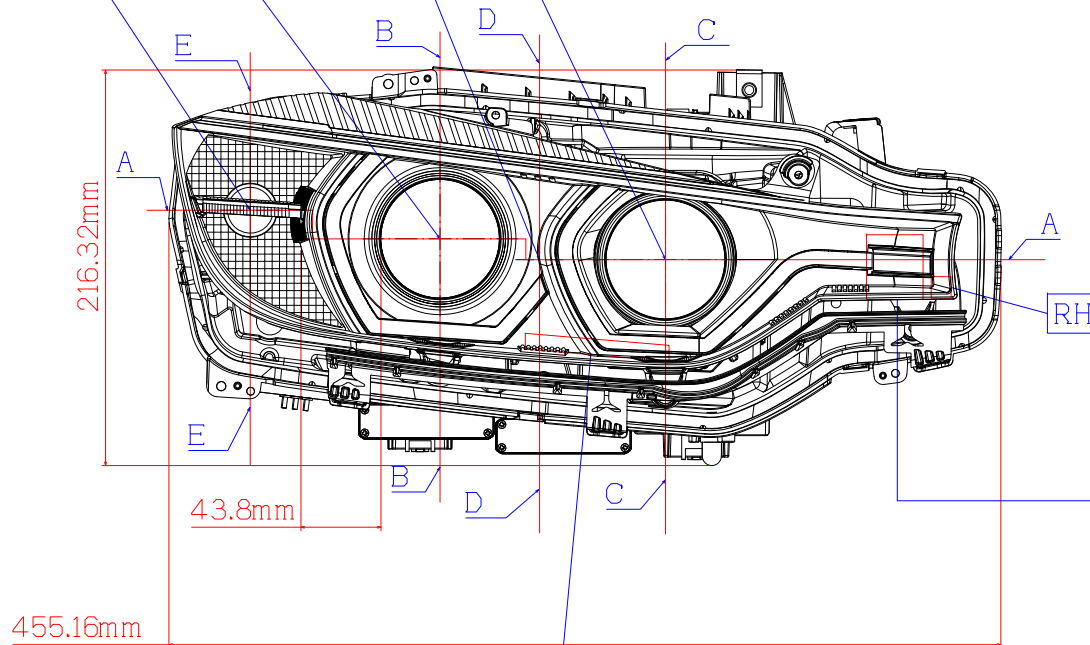
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

CENTER OF REFERENCE (FRONT DIRECTION INDICATOR PY21W 12V21W)

CENTER OF REFERENCE (PASSING BEAM H7 12V55W)

CENTER OF REFERENCE (FRONT POSITION LAMP&DAYTIME RUNNING LAMP 30LED's,12V 3/13.5W)

CENTER OF REFERENCE (DRIVING BEAM H7 12V55W)



RL HCR A 1a (E6) 10 PL
00 01 02 01 0378

FOR LEFT

1a A HCR RL (E6) 10 PL
01 02 01 00 0378

FOR RIGHT

SONAR SK3481 10312

LH SONAR SK3482 10312

UNIT:mm



AUTOMOTIVE certification
Business Class Kantorenpark
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2018.01.09

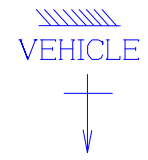


COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-1	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

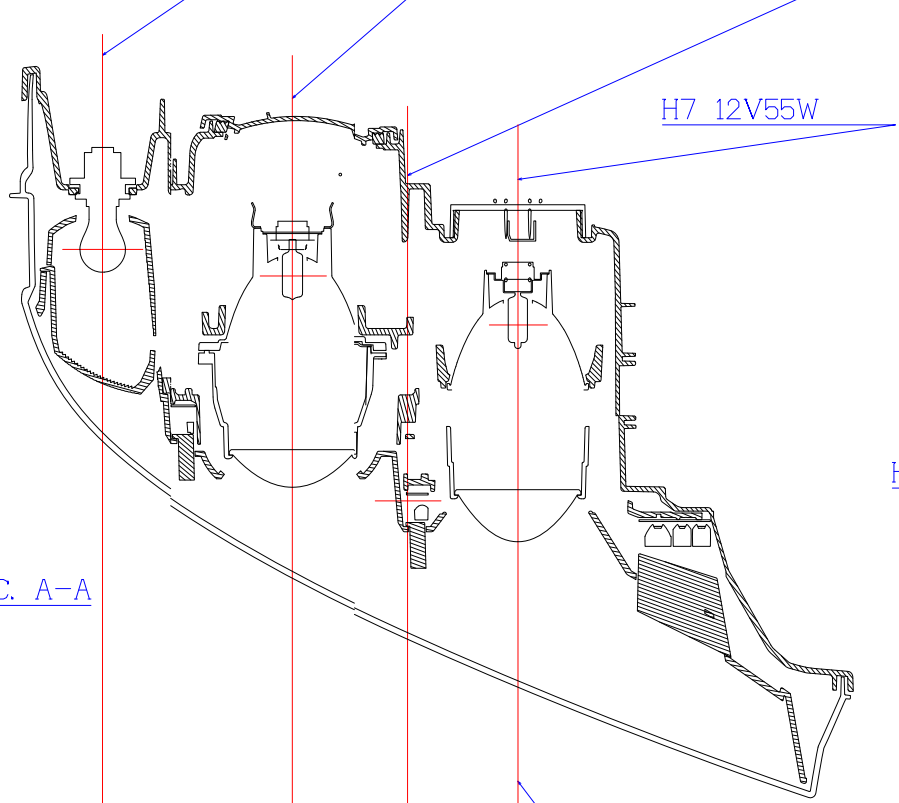
PY21W 12V21W H7 12V55W 30LED's,12V 3/13.5W

DRIVING DIRECTION

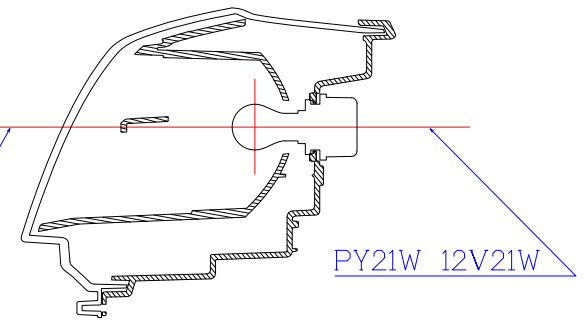
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY,THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



H7 12V55W



AXIS OF REFERENCE
FRONT DIRECTION INDICATOR
HORIZONTAL PLANE OF VEHICLE



PY21W 12V21W

SEC. A-A

SEC. E-E

DRIVING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

LONGITUDINAL PLANE OF VEHICLE
FRONT POSITION LAMP&DAYTIME RUNNING LAMP
AXIS OF REFERENCE

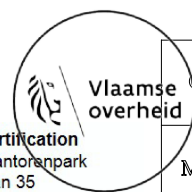
PASSING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE
FRONT DIRECTION INDICATOR

UNIT:mm

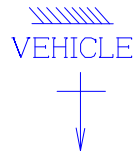


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2018.01.09



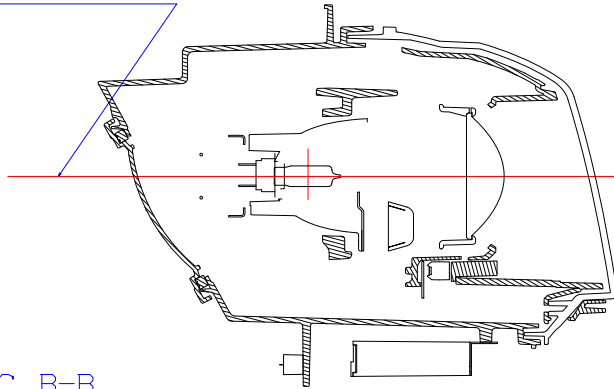
COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-2	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

H7 12V55W

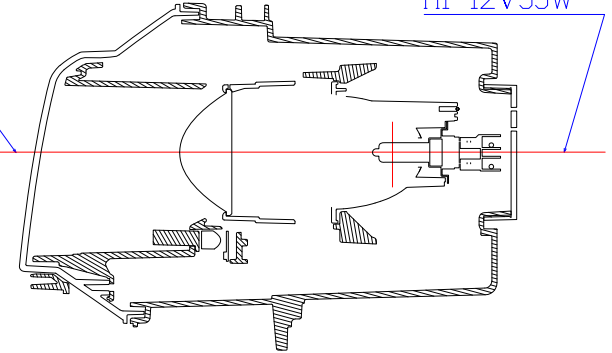


SEC. B-B

DRIVING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

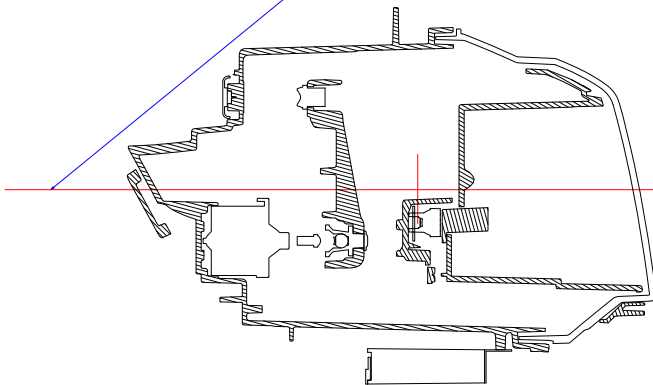
PASSING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

H1 12V55W



SEC. C-C

30LED's, 12V 3/13.5W



SEC. D-D

HORIZONTAL PLANE OF VEHICLE
FRONT POSITION LAMP & DAYTIME RUNNING LAMP
AXIS OF REFERENCE

UNIT: mm



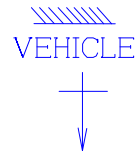
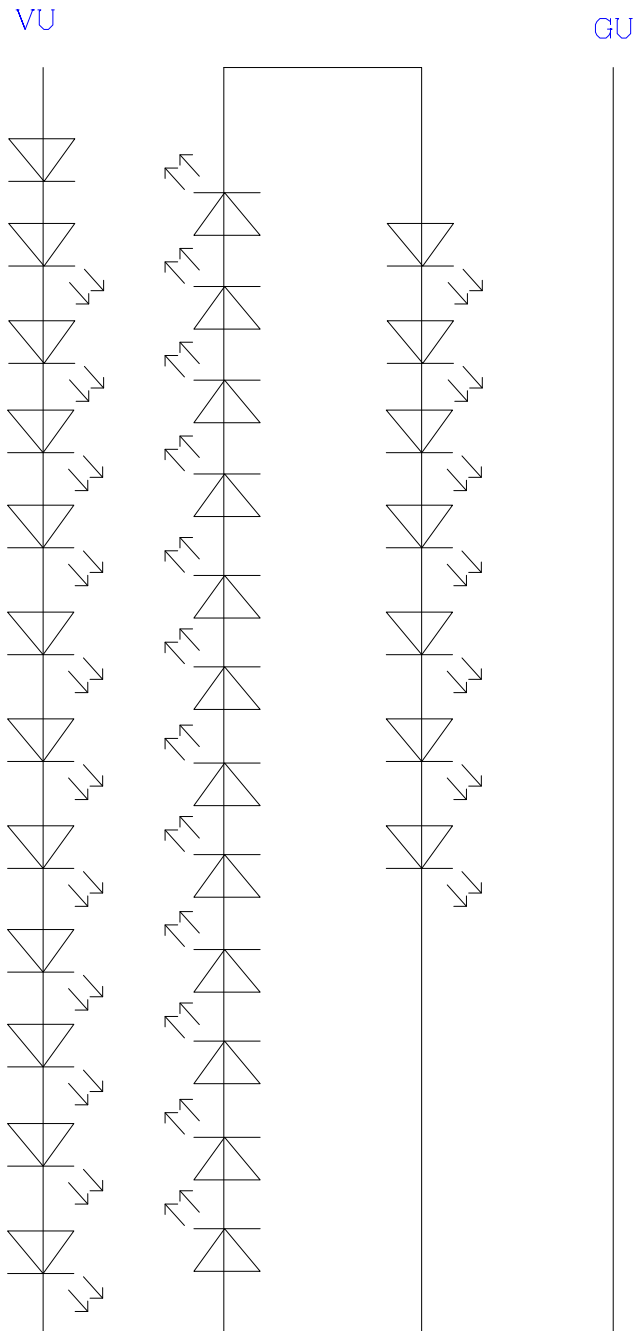
AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-3	DATE: 2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

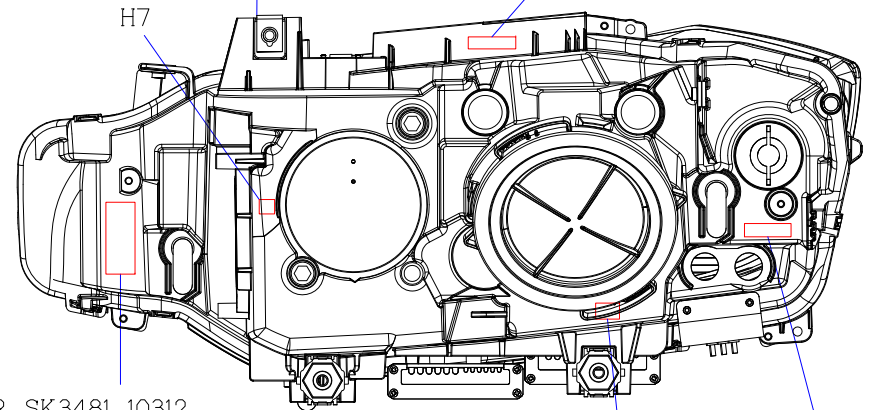
DRIVING DIRECTION

NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



1a A HCR RL (E6) 10 PL
01 02 00 00 0378
SONAR SK3481 10312

12V LED
DRL:13.5W
POS:3W



SONAR SK3481 10312
MADE IN TAIWAN

LENS >PC<
HOUSING >PP+GF30%<
INNER >PC<

12V ~~24V~~

RH

REAR VIEW

UNIT:mm

CIRCUIT DIAGRAM OF FRONT POSITION LAMP&DAYTIME RUNNING LAMP

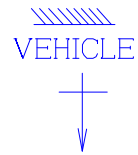


AUTOMOTIVE certification
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2018.01.09

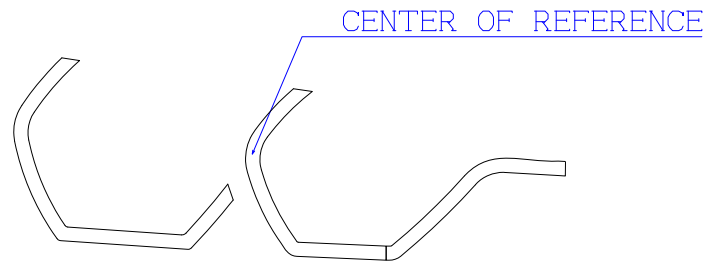


COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-4	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL 8
 2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



面積:3849平方mm

ILLUMINATING SURFACE OF FRONT POSITION LAMP&DAYTIME RUNNING LAMP

UNIT:mm



AUTOMOTIVE certification
 Business Class Kantorenpark
 Jan Olieslagerslaan 35
 B-1800 Vilvoorde
 E-mail: homologation@vincotte.be
 2018.01.09



COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-5	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

Index to the information package of a type approval with regard to a Regulation (UNECE) :

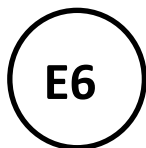
Last applicable Series of amendments	Base approval and update No	Extension No	Revision No	Issue date	Information document	
					Reference	Number of pages
R07-02	00	-	-	09.01.2018	SONAR SK3481(3482)-10312 / 00	8

Approved and to be attached to the approval certificate,



R. VERHELST

Updated Approval No:	E6*07R02/26*0378*00	BEVASYS :	201302504
Update No :	00	Issue date :	09.01.2018



Communication concerning :

- Approval granted ⁽¹⁾
- ~~Approval extended ⁽⁴⁾~~
- ~~Approval refused ⁽⁴⁾~~
- ~~Approval withdrawn ⁽⁴⁾~~
- ~~Production definitively discontinued ⁽⁴⁾~~

of a type of device, pursuant to Regulation No.07

Approval No : E6*07R02/26*0378*00 Extension No : -

Approval mark :

RL HCR A 1a
00 01 02 01
→ →



10 PL

0378

Left hand

1a A HCR RL
01 02 01 00
← ←



10 PL

0378

Right hand

1. Trade name or mark of device : SONAR
2. Manufacturer's name for the type of device : SK3481-10312 / SK3482-10312
3. Manufacturer's name and address : Sonar Auto Parts Co., Ltd.
No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.
4. If applicable, name and address of the manufacturer's representative : -
5. Submitted for approval on : 19.04.2017 ~ 17.05.2017
6. Technical Service responsible for conducting approval test: Vincotte N.V.
Jan Olieslagerslaan 35
1800 Vilvoorde
Belgium
7. Date of test report issued by that Service: 09.01.2018
8. Number of test report issued by that Service : H1760607082/113

9. Concise description : See information document
- 9.1. By category of lamp : A
- For mounting either outside ~~or inside or both~~⁽¹⁾
- Colour of light emitted : White / ~~Red~~⁽¹⁾
- Number, category and kind of light source(s) : 30LEDs / 1 light source
- Voltage and wattage : 12V, 3W
- Light source module specific identification code : -
- Only for limited mounting height of equal to or less than 750mm above the ground : ~~Yes~~ / No⁽¹⁾
- Geometrical conditions of installation and relating variations, if any : See information document
- Application of an electronic light source control gear / variable intensity control :
- (a) Being part of the lamp : ~~Yes~~ / No⁽¹⁾
- (b) Being not part of the lamp : ~~Yes~~ / No⁽¹⁾
- Input voltage(s) supplied by an electronic light source control gear / variable intensity control : 12V
- 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) : -
- Variable luminous intensity : ~~Yes~~ / No⁽¹⁾
- The front position lamp / ~~rear position lamp / stop lamp / end-outline marker lamp~~⁽¹⁾ is only for use on a vehicle fitted with a tell-tale indicating failure : ~~Yes~~ / No⁽¹⁾
- 9.2. Function(s) produced by an interdependent lamp forming part of an interdependent lamp system :
- Front position lamp : ~~Yes~~ / No⁽⁴⁾
- R1 Rear position lamp : ~~Yes~~ / No⁽⁴⁾
- R2 Rear position lamp : ~~Yes~~ / No⁽⁴⁾
- S1 Stop lamp : ~~Yes~~ / No⁽⁴⁾
- S2 Stop lamp : ~~Yes~~ / No⁽⁴⁾
- S3 Stop lamp : ~~Yes~~ / No⁽⁴⁾
- S4 Stop lamp : ~~Yes~~ / No⁽⁴⁾
- End-outline marker lamp : ~~Yes~~ / No⁽⁴⁾
10. Position of approval mark : On the lamp
11. Reason(s) for extension (if applicable) : -
12. Approval granted / ~~extended / refused / withdrawn~~⁽¹⁾

13. Place : Brussels
14. Date : 09.01.2018
15. Signature :

ON BEHALF OF THE SECRETARY-GENERAL:



A handwritten signature in blue ink, reading 'R. Verhelst'.

R. VERHELST

16. 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.

(1) *Delete where not applicable*



VINÇOTTE nv

Registered office: Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium

VAT BE 0462.513.222 • RPM/RPR Brussels • BNP Paribas Fortis: BE24 2100 4113 6338 • BIC: GEBABEBB

Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium • phone: +32 2 674 57 11 • brussels@vincotte.be

ISO/IEC 17020 Accredited inspection body - Accreditation certificate BELAC No. 016-INSP

1. **SUBJECT : FRONT AND REAR POSITION (SIDE) LAMPS
STOP-LAMPS
END-OUTLINE MARKER LAMPS**

R7-02

2. **REF. :** Report number : **H1760607082/113** No. of pages : 1 of 13 No. of annexes : -
Bevasys : 201302504 Approval No. : (0378 00) Update : 00

3. **GENERALITIES :**

Make of Device : SONAR

Commercial Type : -

Manufacturer's Type : SK3481-10312 / SK3482-10312

Name and address of the manufacturer :

Sonar Auto Parts Co., Ltd.

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

4. **TESTS :** Date and place : 2017.04.19 to 2017.05.17
SUN-JET VISIBLE LIGHT LABORATORY
Applied document(s) : SONAR SK3481(3482)-10312 / 00
Inspector : LU Wan-Ching
Persons witnessing the tests : LU Wan-Ching
Location of E-mark : On the lamp

5. **CONCLUSIONS :**

The tests were carried out according to the following specifications :

- UNECE Regulation No. 7 incorporating supplement 26 to the 02 series of amendments.

The models presented comply with the requirements to be applied.

Date : 2018.01.09

Signature :



VINÇOTTE nv/sa
LU Wan-Ching
Automotive Certification

DESCRIPTION OF THE TESTED LAMP

Lamp type : Front position lamp, which is reciprocally incorporated with daytime running lamp.
 Lamp category : A
 Category and kind of light source(s) : LED
 Number of light source(s) : 30LEDs / 1 light source
 Voltage and wattage : 12V, 3W

GENERAL SPECIFICATIONS

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
The requirements contained in sections 5. "General specifications" and 6. "Individual specifications" and in the Annexes referenced in the said sections of Regulations Nos. 48, 53, 74 or 86, and their series of amendments in force at the time of application for the lamp type approval shall apply to this Regulation. 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.	5.		
Each device supplied shall conform to the specifications set forth in § 6 and 8 below.	5.1.	X	
The devices must be 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 this Regulation.	5.2.	X	
Lamps having been approved as front or rear position lamps, are deemed being also approved end-outline marker lamps.	5.3.		X
Front and rear position lamps which are grouped or combined or reciprocally incorporated may also be used as end-outline marker lamps.	5.4.		X
Position lamps, which are reciprocally incorporated with another function, using a common light source, and designed to operate permanently with an additional system to regulate the intensity of the light emitted, are permitted.	5.5.	X	
However, in the case of rear position lamp reciprocally incorporated with a stop lamp, the device shall either: (a) Be a part of a multiple light source arrangement, or (b) Be intended for use in a vehicle equipped with a failure monitoring system for that function. In either case, a note shall be made within the communication document.	5.5.1.		X
In the case of light source modules, it shall be checked that:	5.6.		X
The design of the light source module(s) shall be 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 device, light source modules having different characteristics can not be interchanged within the same lamp housing.	5.6.1.		
The light source module(s) shall be tamperproof.	5.6.2.		
A light source module shall be so designed that regardless of the use of tool(s), it shall not be mechanically interchangeable with any replaceable approved light source.	5.6.3.		
If the front position lamp incorporates one or more infrared radiation generators, the photometric and colour requirements for this front position lamp shall be met with and without the operation of the infrared radiation generator(s).	5.7		X



SONAR AUTO PARTS CO., LTD.

Head Office:

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

Taipei Plant:

No.263, Yingtao Rd. Yingge District,
New Taipei City, Taiwan R.O.C

Tainan Plant:

No. 185, Sec. 1, Jhongshan Rd., Guiren District,
Tainan City, Taiwan, R.O.C.

COMBINATION HEADLAMP

SONAR SK3481-10312 / SK3482-10312 for Right Hand Traffic

Application: original

Date: March 13, 2013

Total number of pages: 8



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



Manufacturer name and address: Sonar Auto Parts Co., Ltd.

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

Trade name or mark : SONAR

Type of device : SK3481-10312 / SK3482-10312

SPECIFICATIONS**Function-Application-class category lamp and colour**

AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09

Trade name or mark		SONAR			
Function	Headlamp		Front Direction Indicator	Front ⁽¹⁾ Position Lamp	Daytime ⁽¹⁾ Running Lamp
	Driving Beam	Passing Beam			
ECE Regulation	112-01 Supplement 7	112-01 Supplement 7	6-01 Supplement 27	7-02 Supplement 26	87-00 Supplement 19
Class	B	B	-	-	-
Category	-	-	1a	A	-
Number, category and kind of lamp source(s)	1×H7	1×H7	1×PY21W	30LEDs / 1 light source	30LEDs / 1 light source
Voltage and wattage	12V, 55W	12V, 55W	12V, 21W	12V, 3W	12V, 13.5W
Lens	Outer	Clear	Clear	Clear	Clear
	Filter (Inner)	Clear	Clear	Clear	Clear
Colour of light emitted		White	White	Amber	White

⁽¹⁾ Front position lamp, which is reciprocally incorporated with daytime running lamp.

TECHNICAL DATA

Part		Material	Remark
Lens	Outer	PC (polycarbonate)	GE ⁽²⁾
	Filter (Inner)	PC (polycarbonate)	GE ⁽²⁾
	Filter (Inner) for passing beam and driving beam	Glass	-
Reflector		PBT+PET+M20% ⁽³⁾	Adjustable
Housing		PP + GF30%	-

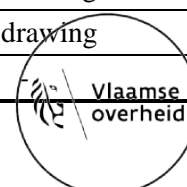
⁽²⁾ The base material of lens: Type number is LEXAN Resin LS2 from GE Advanced Materials.

The hard coating: Type number is UVT 2008 from Shiang Yuan.

⁽³⁾ There are two kinds of sub-reflectors, one is electroplate and the other is black.

MARKING

Marking		Location
Trade name or mark	SONAR	See drawing
Approval marks	0378	See drawing
LED module code	-	



DRAWINGS	
Reference	Version
SK3481(3482) 10312-1	2017.05.08
SK3481(3482) 10312-2	2017.05.08
SK3481(3482) 10312-3	2017.05.08
SK3481(3482) 10312-4	2017.05.08
SK3481(3482) 10312-5	2017.05.08

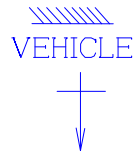
(Null below)



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



DRIVING DIRECTION



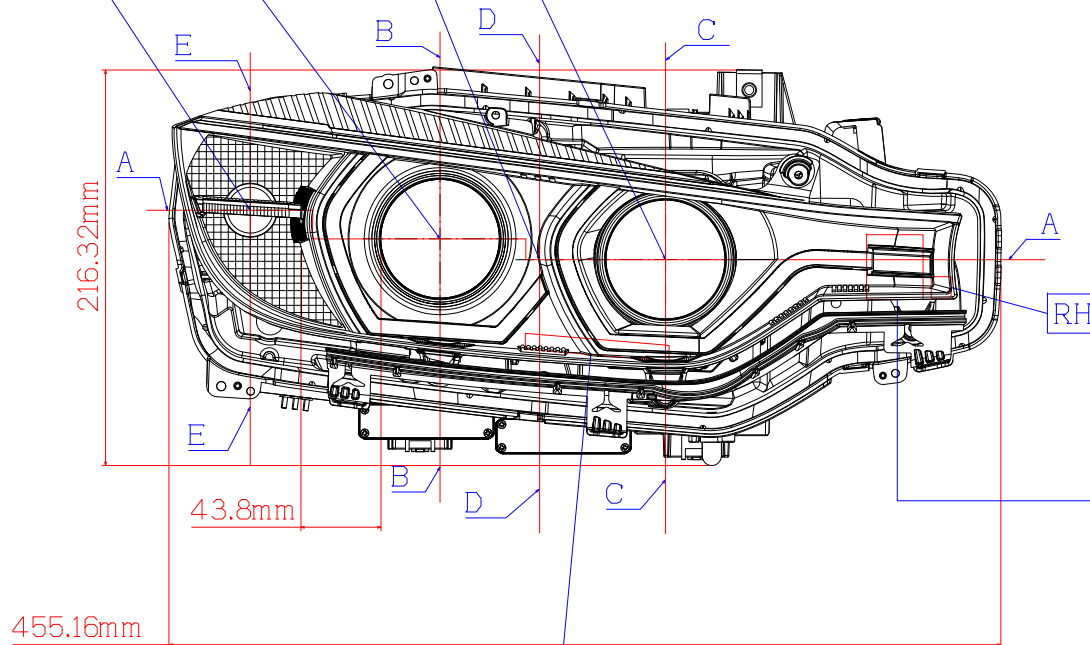
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

CENTER OF REFERENCE (FRONT DIRECTION INDICATOR PY21W 12V21W)

CENTER OF REFERENCE (PASSING BEAM H7 12V55W)

CENTER OF REFERENCE (FRONT POSITION LAMP&DAYTIME RUNNING LAMP 30LED's,12V 3/13.5W)

CENTER OF REFERENCE (DRIVING BEAM H7 12V55W)



RL HCR A 1a (E6) 10 PL
00 01 02 01 0378

FOR LEFT

1a A HCR RL (E6) 10 PL
01 02 01 00 0378

FOR RIGHT

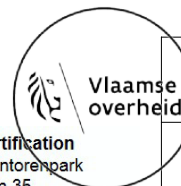
SONAR SK3481 10312

LH SONAR SK3482 10312

UNIT:mm



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09

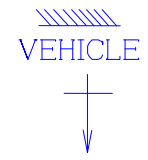


COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-1	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

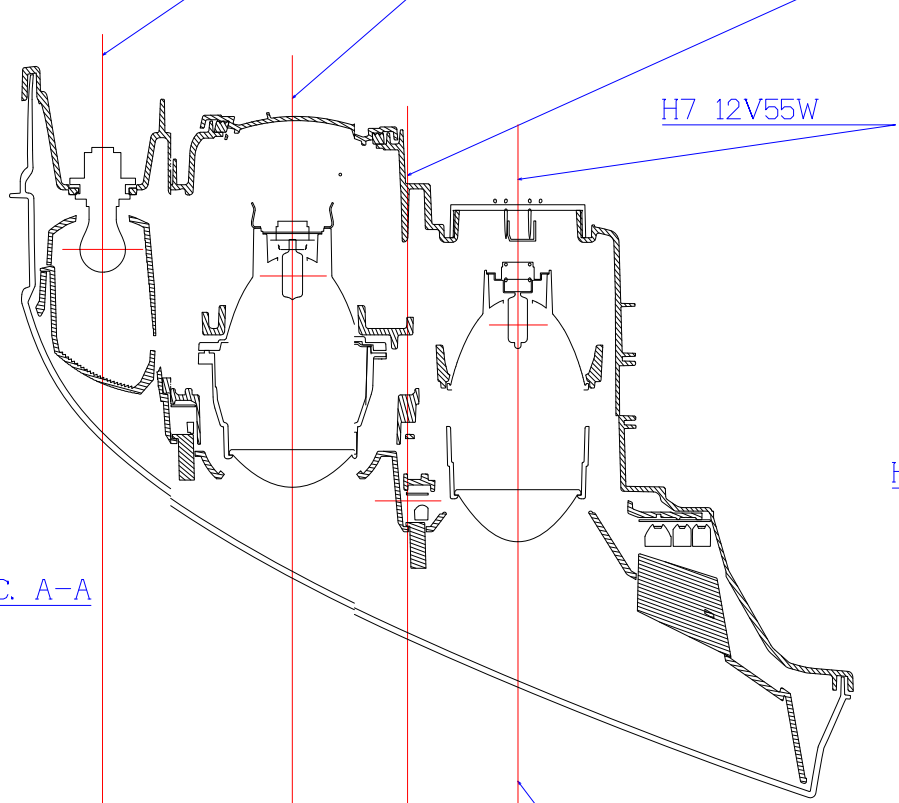
PY21W 12V21W H7 12V55W 30LED's,12V 3/13.5W

DRIVING DIRECTION

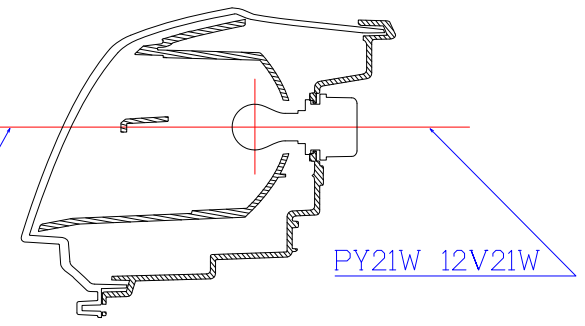
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY,THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



H7 12V55W



AXIS OF REFERENCE
FRONT DIRECTION INDICATOR
HORIZONTAL PLANE OF VEHICLE



PY21W 12V21W

SEC. A-A

SEC. E-E

DRIVING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

LONGITUDINAL PLANE OF VEHICLE
FRONT POSITION LAMP&DAYTIME RUNNING LAMP
AXIS OF REFERENCE

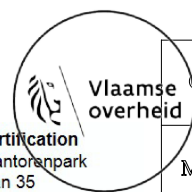
PASSING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE
FRONT DIRECTION INDICATOR

UNIT:mm

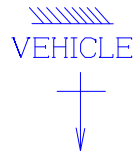


AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



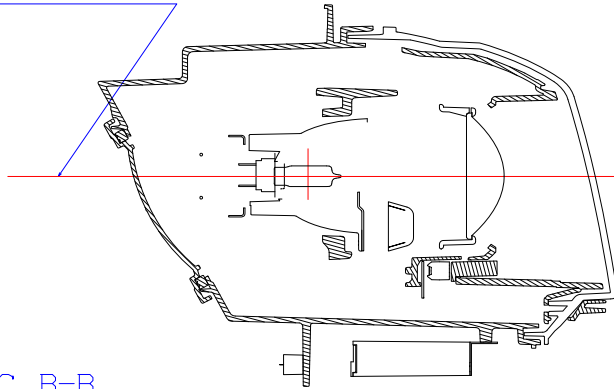
COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-2	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

H7 12V55W

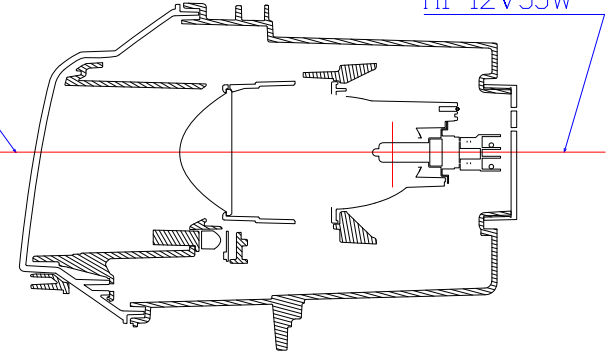


SEC. B-B

DRIVING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

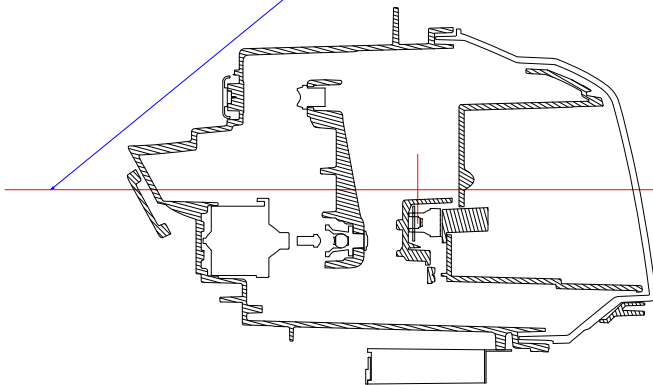
PASSING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

H1 12V55W



SEC. C-C

30LED's,12V 3/13.5W



SEC. D-D

HORIZONTAL PLANE OF VEHICLE
FRONT POSITION LAMP & DAYTIME RUNNING LAMP
AXIS OF REFERENCE

UNIT:mm



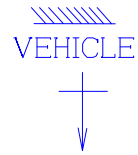
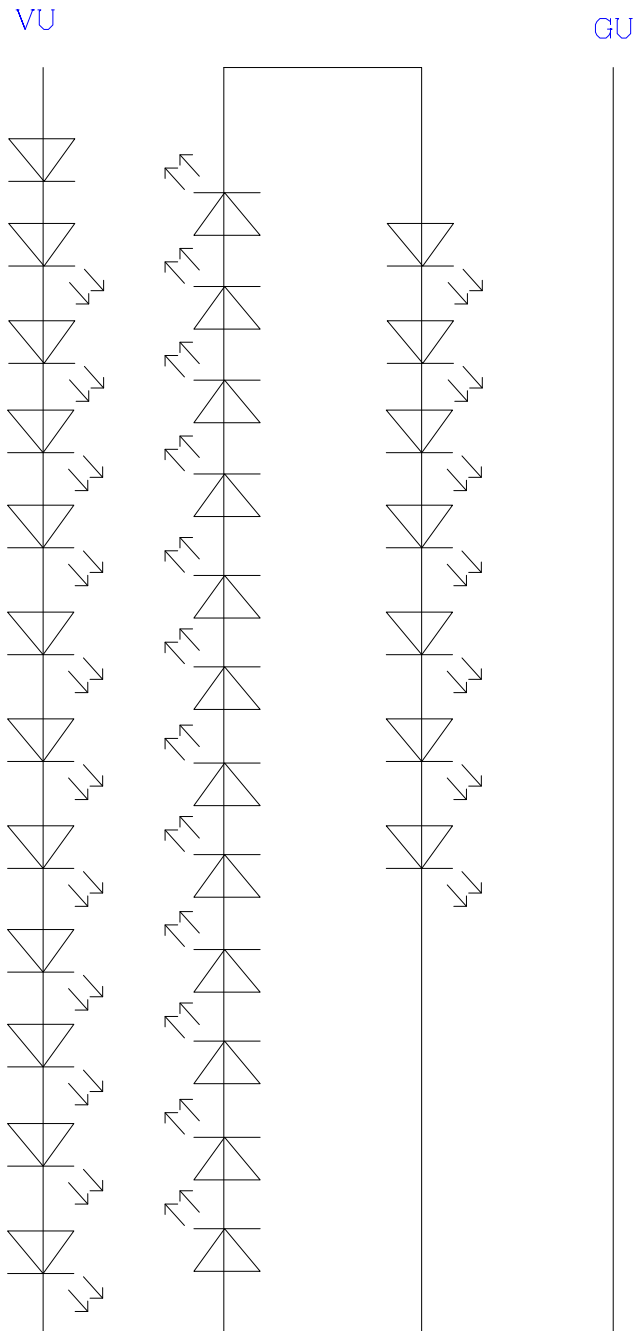
AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-3	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

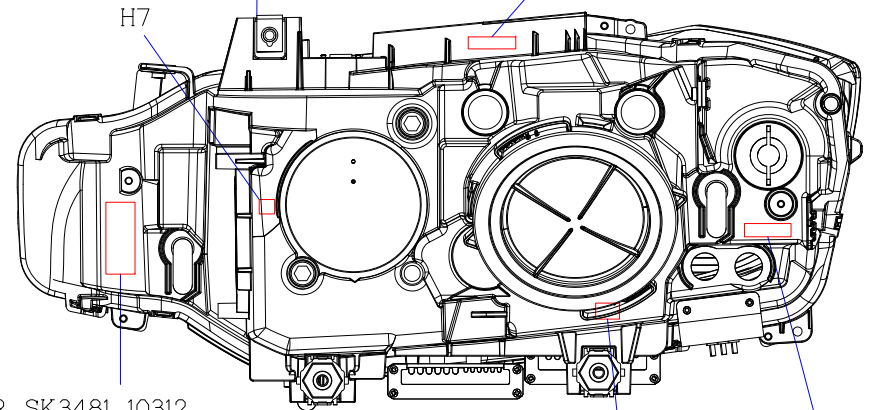
DRIVING DIRECTION

NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



1a A HCR RL (E6) 10 PL
01 02 00 00 0378
SONAR SK3481 10312

12V LED
DRL:13.5W
POS:3W



SONAR SK3481 10312
MADE IN TAIWAN

LENS >PC<
HOUSING >PP+GF30%<
INNER >PC<

12V ~~24V~~

RH

REAR VIEW

UNIT:mm

CIRCUIT DIAGRAM OF FRONT POSITION LAMP & DAYTIME RUNNING LAMP

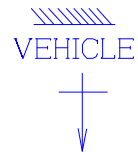


AUTOMOTIVE certification
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E-mail: homologation@vincotte.be
2018.01.09

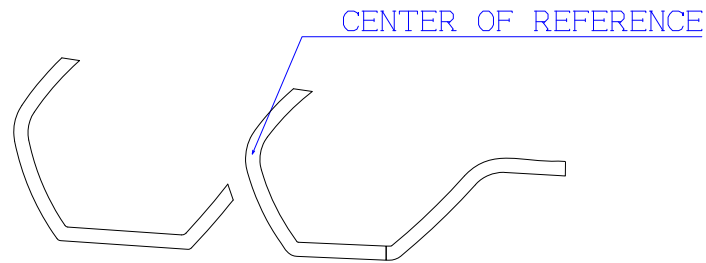


COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-4	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL 8
 2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



面積:3849平方mm

ILLUMINATING SURFACE OF FRONT POSITION LAMP&DAYTIME RUNNING LAMP

UNIT:mm



AUTOMOTIVE certification
 Business Class Kantorenpark
 Jan Olieslagerslaan 35
 B-1800 Vilvoorde
 E-mail: homologation@vincotte.be
 2018.01.09



COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-5	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

Index to the information package of a type approval with regard to a Regulation (UNECE) :

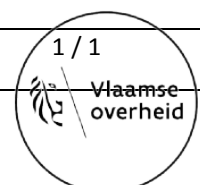
Last applicable Series of amendments	Base approval and update No	Extension No	Revision No	Issue date	Information document	
					Reference	Number of pages
R87-00	00	-	-	09.01.2018	SONAR SK3481(3482)-10312 / 00	8

Approved and to be attached to the approval certificate,



R. VERHELST

Updated Approval No:	E6*87R00/19*0378*00	BEVASYS :	201302505
Update No :	00	Issue date :	09.01.2018





Communication concerning :

- Approval granted ⁽¹⁾
- ~~Approval extended ⁽⁴⁾~~
- ~~Approval refused ⁽⁴⁾~~
- ~~Approval withdrawn ⁽⁴⁾~~
- ~~Production definitively discontinued ⁽⁴⁾~~

of a type of daytime running lamp, pursuant to Regulation No.87

Approval No : E6*87R00/19*0378*00

Extension No : -

Approval mark :

RL HCR A 1a
00 01 02 01
→ →



10 PL

0378

Left hand

1a A HCR RL
01 02 01 00
← ←



10 PL

0378

Right hand

1. Trade name or mark of the daytime running lamp : SONAR
2. Manufacturer's name for the type of daytime running lamp : SK3481-10312 / SK3482-10312
3. Manufacturer's name and address : Sonar Auto Parts Co., Ltd.
No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.
4. If applicable, name and address of the manufacturer's representative : -
5. Submitted for approval on : 19.04.2017 ~ 18.05.2017
6. Technical Service responsible for conducting approval test: Vincotte N.V.
Jan Olieslagerslaan 35
1800 Vilvoorde
Belgium
7. Date of test report issued by that Service : 09.01.2018
8. Number of test report issued by that Service: H1760607082/114

9.	Concise description :	See information document
	By category of lamp :	RL
	Number, category and kind of light source(s) ⁽²⁾ :	30LEDs / 1 light source
	Voltage and wattage :	12V, 13.5W
	Application of an electronic light source control gear / variable intensity control :	
	(a) Being part of the lamp :	Yes / No ⁽¹⁾
	(b) Being not part of the lamp :	Yes / No ⁽¹⁾
	Input voltage(s) supplied by an electronic light source control gear / variable intensity control :	12V
	Electronic light source control gear manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body) :	-
	The lamp is only for use on a vehicle fitted with a tell-tale indicating failure :	Yes / No ⁽¹⁾
10.	The daytime running lamp is designed as an interdependent lamp system :	Yes / No ⁽¹⁾
	The interdependent lamp system consists of 2/3 interdependent lamps.	-
11.	Position of approval mark :	On the lamp
12.	Reason(s) for extension (if applicable) :	-
13.	Approval granted / extended / refused / withdrawn ⁽¹⁾	

14. Place : Brussels
15. Date : 09.01.2018
16. Signature :

ON BEHALF OF THE SECRETARY-GENERAL:



A handwritten signature in blue ink, reading 'R. Verhelst'.

R. VERHELST

17. The following documents, bearing the approval number shown above, are available on request.

- (1) *Delete where not applicable*
- (2) *For daytime running lamps with non-replaceable light sources indicate the number and total wattage of the light sources used.*



VINÇOTTE nv

Registered office: Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium

VAT BE 0462.513.222 • RPM/RPR Brussels • BNP Paribas Fortis: BE24 2100 4113 6338 • BIC: GEBABEBB

Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium • phone: +32 2 674 57 11 • brussels@vincotte.be

ISO/IEC 17020 Accredited inspection body - Accreditation certificate BELAC No. 016-INSP

1. **SUBJECT : DAYTIME RUNNING LAMPS**

R87-00

2. **REF. :** Report number : **H1760607082/114**

No. of pages : 1 of 11

No. of annexes : -

Bevasys : 201302505

Approval No. : (0378 00)

Update : 00

3. **GENERALITIES :**

Make of Device : SONAR

Commercial Type : -

Manufacturer's Type : SK3481-10312 / SK3482-10312

Name and address of the manufacturer :

Sonar Auto Parts Co., Ltd.

No. 427, Sec. 2, Wenhua Rd., Panchiao District,

New Taipei City, Taiwan, R.O.C.

4. **TESTS :** Date and place : 2017.04.19 to 2017.05.18

SUN-JET VISIBLE LIGHT LABORATORY

Applied document(s) : SONAR SK3481(3482)-10312 / 00

Inspector : LU Wan-Ching

Persons witnessing the tests : LU Wan-Ching

Location of E-mark : On the lamp

5. **CONCLUSIONS :**

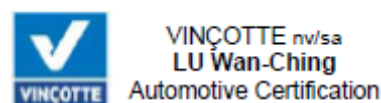
The tests were carried out according to the following specifications :

- UNECE Regulation No. 87 incorporating supplement 19 to the original version.

The models presented comply with the requirements to be applied.

Date : 2018.01.09

Signature :




Vlaamse
overheid

2BH/LWC-DV

22B-AT

DESCRIPTION OF THE TESTED DAYTIME RUNNING LAMPS

Lamp type : Daytime running lamp, which is reciprocally incorporated with front position lamp.
 Category and kind of light source(s) : LED
 Number of light source : 30LEDs / 1 light source
 Voltage and wattage : 12V, 13.5W

GENERAL SPECIFICATIONS

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
The requirements contained in sections 5. "General specifications" and 6. "Individual specifications" and in the Annexes referenced in the said sections of Regulations Nos. 48, 53 or 86, and their series of amendments in force at the time of application for the lamp type approval shall apply to this Regulation.	6.		
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.			
Each daytime running lamp shall conform to the specifications set forth in the paragraphs below. An interdependent lamp system shall meet the requirements when all its interdependent lamps are operated together.	6.1.	X	
Daytime running lamps shall be so designed and constructed that in normal use, despite the vibrations to which they may be subjected, they continue to function satisfactorily retain the characteristics prescribed by this Regulation.	6.2.	X	
In the case of light source modules, it shall be checked that :	6.3.		X
The design of the light source module(s) shall be such as :	6.3.1.		
(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 device, light source modules having different characteristics can not be interchanged within the same lamp housing.			
The light source module(s) shall be tamperproof.	6.3.2.		
A light source module shall be so designed that regardless of the use of tool(s), it shall not be mechanically interchangeable with any replaceable approved light source.	6.3.3.		
Daytime running lamps, which are reciprocally incorporated with another function, using a common light source, and designed to operate permanently with an electronic light source control gear to regulate the intensity of the light emitted, are permitted.	6.4.	X	
In the case of replaceable light source(s):	6.5.		X
Any category or categories of filament lamp(s) approved according to Regulation No. 37 and/or Regulation No. 128 may be used, provided that no restriction on the use is made in Regulation No. 37 and its series of amendments in force at the time of application for type approval or in Regulation No. 128 and its series of amendments in force at the time of application for type approval.	6.5.1.		
The design of the daytime running lamp shall be such that the light sources can be fixed in no other position but the correct one.	6.5.2.		
The light source holder shall conform to the characteristics given in IEC Publication 60061. The holder data sheet relevant to the category of light source used, applies.	6.5.3.		
In the case of non-replaceable filament lamp(s) or light source module(s) equipped with non-replaceable filament lamp(s), the applicant shall annex to the type approval documentation a report (by the light source manufacturer indicated in the type approval documentation), acceptable to the Type Approval Authority, that demonstrates compliance of these non-replaceable filament lamp(s) with the requirements as specified in paragraph 4.11. of IEC 60809, Edition 3.	6.6.		X



SONAR AUTO PARTS CO., LTD.

Head Office:

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

Taipei Plant:

No.263, Yingtao Rd. Yingge District,
New Taipei City, Taiwan R.O.C

Tainan Plant:

No. 185, Sec. 1, Jhongshan Rd., Guiren District,
Tainan City, Taiwan, R.O.C.

COMBINATION HEADLAMP

SONAR SK3481-10312 / SK3482-10312 for Right Hand Traffic

Application: original

Date: March 13, 2013

Total number of pages: 8



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerlaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



Manufacturer name and address: Sonar Auto Parts Co., Ltd.

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

Trade name or mark : SONAR

Type of device : SK3481-10312 / SK3482-10312

SPECIFICATIONS**Function-Application-class category lamp and colour**

AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09

Trade name or mark	SONAR				
Function	Headlamp		Front Direction Indicator	Front ⁽¹⁾ Position Lamp	Daytime ⁽¹⁾ Running Lamp
	Driving Beam	Passing Beam			
ECE Regulation	112-01 Supplement 7	112-01 Supplement 7	6-01 Supplement 27	7-02 Supplement 26	87-00 Supplement 19
Class	B	B	-	-	-
Category	-	-	1a	A	-
Number, category and kind of lamp source(s)	1×H7	1×H7	1×PY21W	30LEDs / 1 light source	30LEDs / 1 light source
Voltage and wattage	12V, 55W	12V, 55W	12V, 21W	12V, 3W	12V, 13.5W
Lens	Outer	Clear	Clear	Clear	Clear
	Filter (Inner)	Clear	Clear	Clear	Clear
Colour of light emitted	White	White	Amber	White	White

⁽¹⁾ Front position lamp, which is reciprocally incorporated with daytime running lamp.

TECHNICAL DATA

Part	Material	Remark
Lens	Outer	PC (polycarbonate) GE ⁽²⁾
	Filter (Inner)	PC (polycarbonate) GE ⁽²⁾
	Filter (Inner) for passing beam and driving beam	Glass -
Reflector	PBT+PET+M20% ⁽³⁾	Adjustable
Housing	PP + GF30%	-

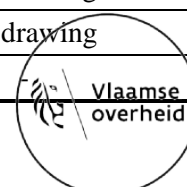
⁽²⁾ The base material of lens: Type number is LEXAN Resin LS2 from GE Advanced Materials.

The hard coating: Type number is UVT 2008 from Shiang Yuan.

⁽³⁾ There are two kinds of sub-reflectors, one is electroplate and the other is black.

MARKING

Marking	Location
Trade name or mark	SONAR See drawing
Approval marks	0378 See drawing
LED module code	-



DRAWINGS	
Reference	Version
SK3481(3482) 10312-1	2017.05.08
SK3481(3482) 10312-2	2017.05.08
SK3481(3482) 10312-3	2017.05.08
SK3481(3482) 10312-4	2017.05.08
SK3481(3482) 10312-5	2017.05.08

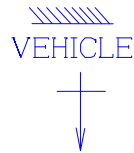
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AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



DRIVING DIRECTION



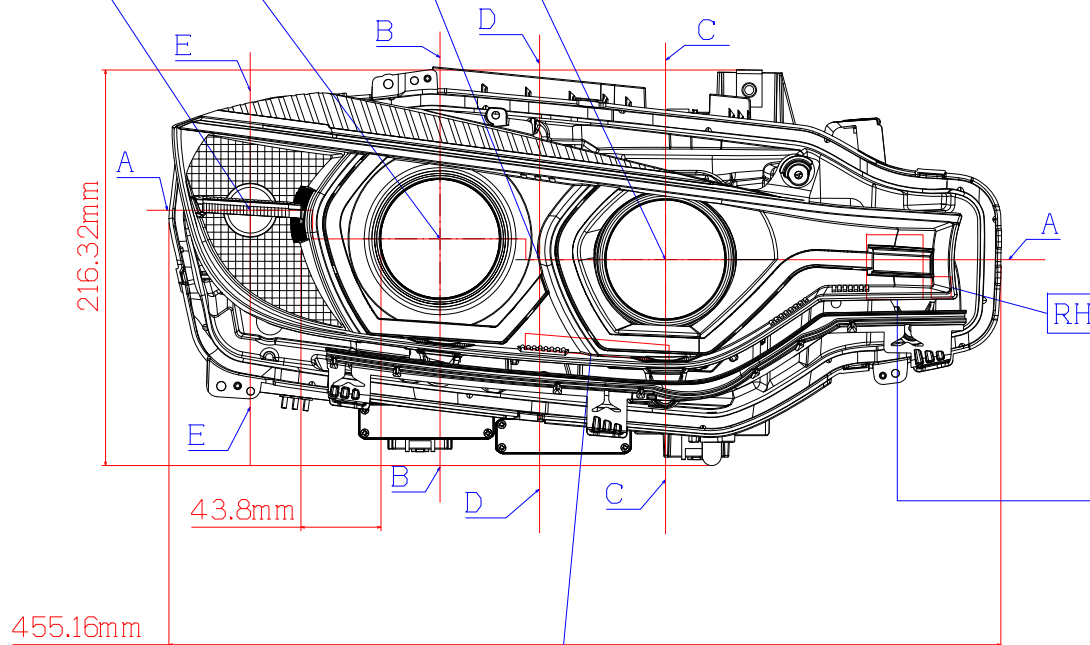
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

CENTER OF REFERENCE (FRONT DIRECTION INDICATOR PY21W 12V21W)

CENTER OF REFERENCE (PASSING BEAM H7 12V55W)

CENTER OF REFERENCE (FRONT POSITION LAMP&DAYTIME RUNNING LAMP 30LED's,12V 3/13.5W)

CENTER OF REFERENCE (DRIVING BEAM H7 12V55W)



RL HCR A 1a (E6) 10 PL
00 01 02 01 0378

FOR LEFT

1a A HCR RL (E6) 10 PL
01 02 01 00 0378

FOR RIGHT

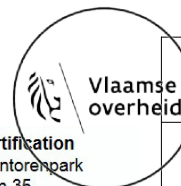
SONAR SK3481 10312

LH SONAR SK3482 10312

UNIT:mm



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09

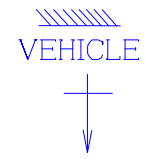


COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-1	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

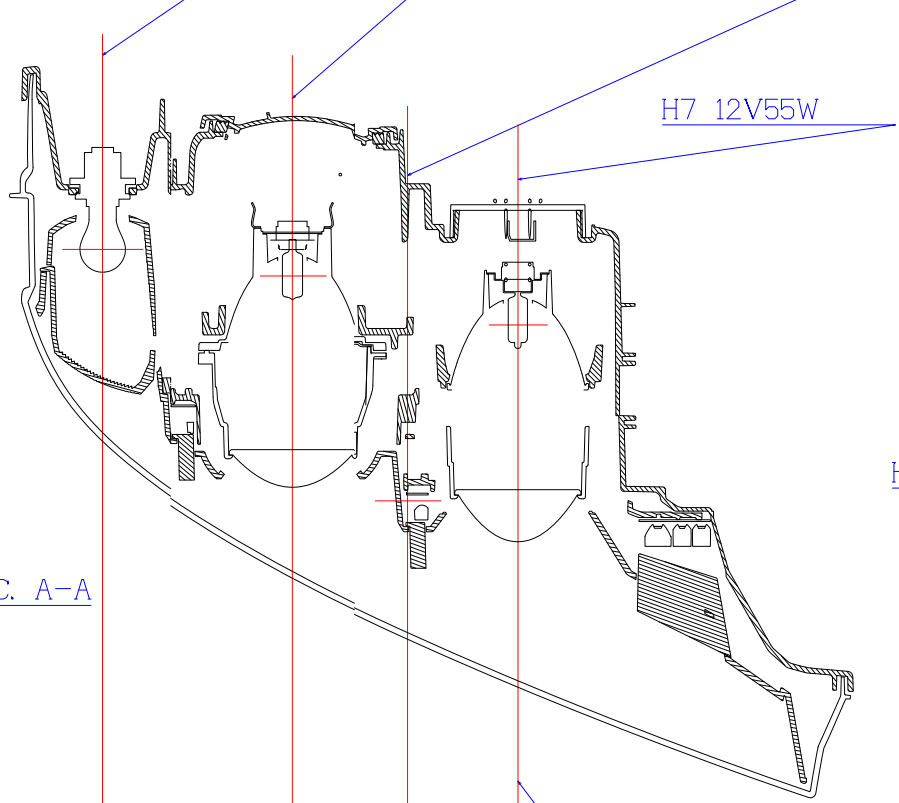
PY21W 12V21W H7 12V55W 30LED's,12V 3/13.5W

DRIVING DIRECTION

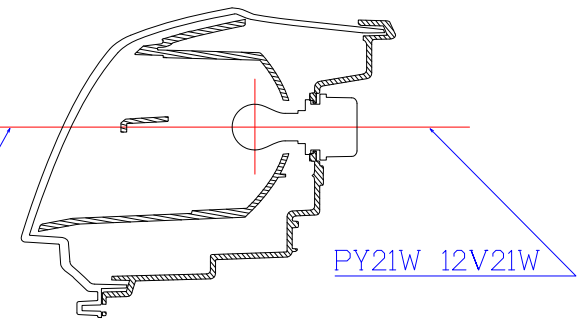
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY,THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



H7 12V55W



AXIS OF REFERENCE
FRONT DIRECTION INDICATOR
HORIZONTAL PLANE OF VEHICLE



PY21W 12V21W

SEC. A-A

SEC. E-E

DRIVING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

LONGITUDINAL PLANE OF VEHICLE
FRONT POSITION LAMP&DAYTIME RUNNING LAMP
AXIS OF REFERENCE

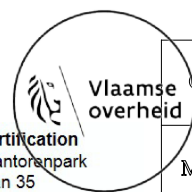
PASSING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE
FRONT DIRECTION INDICATOR

UNIT:mm

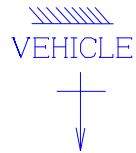


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E-mail: homologation@vincotte.be
2018.01.09



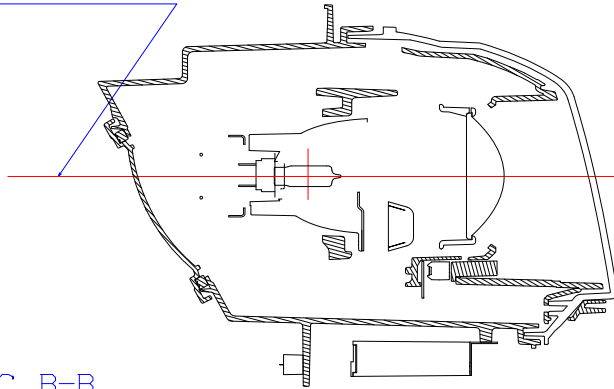
COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-2	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

H7 12V55W

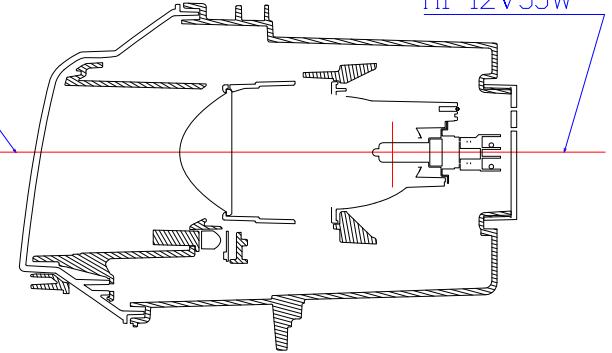


SEC. B-B

DRIVING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

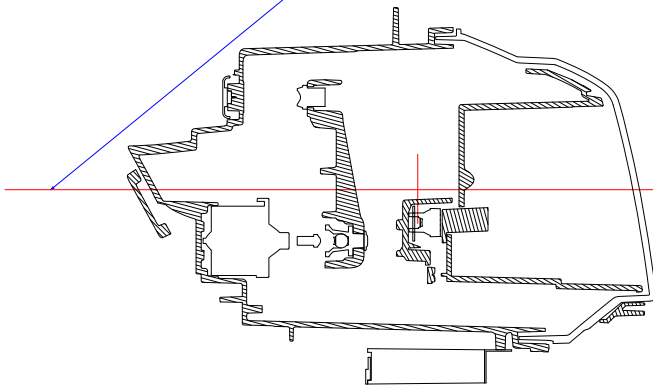
PASSING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

H1 12V55W



SEC. C-C

30LED's,12V 3/13.5W



SEC. D-D

HORIZONTAL PLANE OF VEHICLE
FRONT POSITION LAMP & DAYTIME RUNNING LAMP
AXIS OF REFERENCE

UNIT:mm



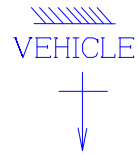
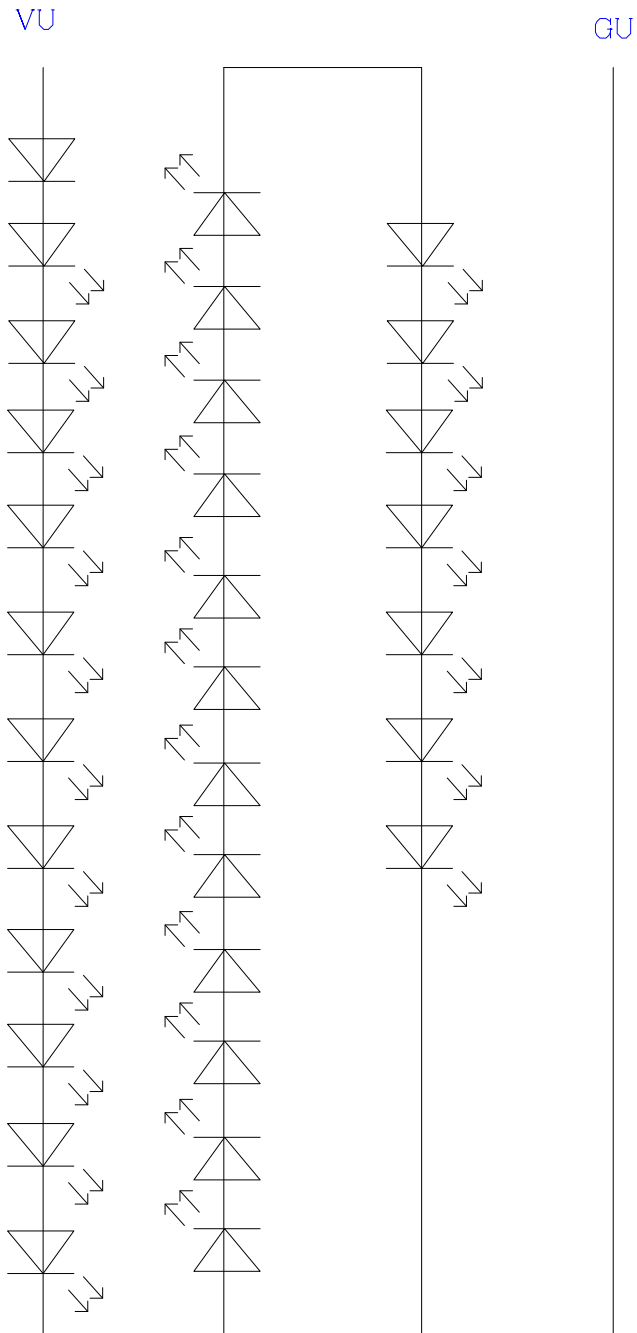
AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-3	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

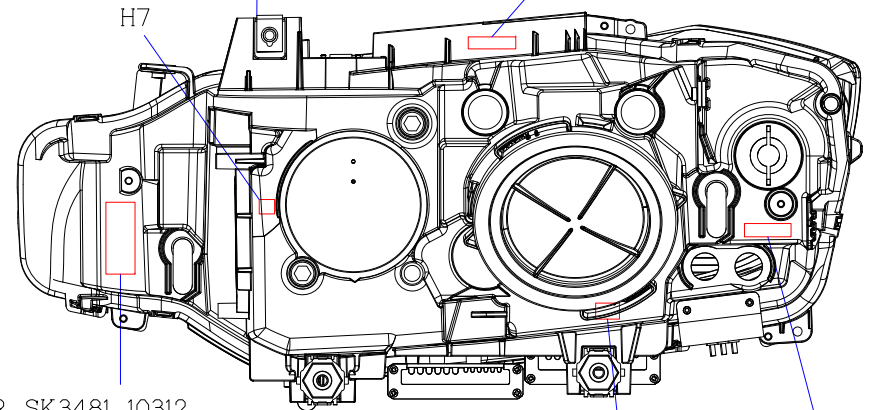
DRIVING DIRECTION

NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



1a A HCR RL (E6) 10 PL
01 02 00 00 0378
SONAR SK3481 10312

12V LED
DRL:13.5W
POS:3W



SONAR SK3481 10312
MADE IN TAIWAN

LENS >PC<
HOUSING >PP+GF30%<
INNER >PC<

12V ~~24V~~

RH

REAR VIEW

UNIT:mm

CIRCUIT DIAGRAM OF FRONT POSITION LAMP & DAYTIME RUNNING LAMP

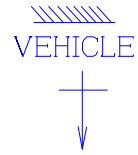


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E-mail: homologation@vincotte.be
2018.01.09

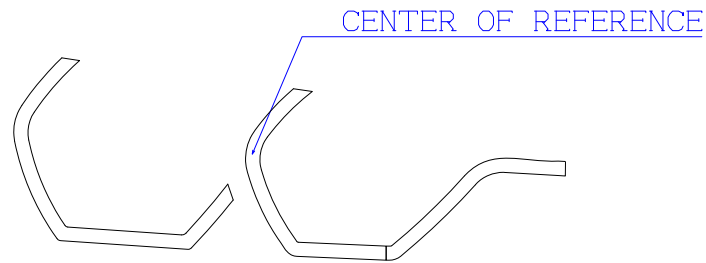


COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-4	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY,THE LEFT SIDE SHALL BE SYMMETRICAL 8
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



面積:3849平方mm

ILLUMINATING SURFACE OF FRONT POSITION
LAMP&DAYTIME RUNNING LAMP

UNIT:mm



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-5	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

Index to the information package of a type approval with regard to a Regulation (UNECE) :

Last applicable Series of amendments	Base approval and update No	Extension No	Revision No	Issue date	Information document	
					Reference	Number of pages
R112-01	00	-	-	09.01.2018	SONAR SK3481(3482)-10312 / 00	8

Approved and to be attached to the approval certificate,



R. VERHELST

Updated Approval No:	E6*112R01/07*0378*00	BEVASYS :	201302506
Update No :	00	Issue date :	09.01.2018



Communication concerning :

- Approval granted ⁽¹⁾
- ~~Approval extended ⁽⁴⁾~~
- ~~Approval refused ⁽⁴⁾~~
- ~~Approval withdrawn ⁽⁴⁾~~
- ~~Production definitively discontinued ⁽⁴⁾~~

of a type of headlamp, pursuant to Regulation No.112

Approval No : E6*112R01/07*0378*00 Extension No : -

Approval mark :

RL HCR A 1a
00 01 02 01
→ →



10 PL

0378

Left hand

1a A HCR RL
01 02 01 00
← ←



10 PL

0378

Right hand

1. Trade name or mark of the device: SONAR
2. Manufacturer's name for the type of device : SK3481-10312 / SK3482-10312 for right hand traffic
3. Manufacturer's name and address : Sonar Auto Parts Co., Ltd.
No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.
4. If applicable, name and address of the manufacturer's representative : -
5. Submitted for approval on : 19.04.2017 ~ 20.10.2017
6. Technical Service responsible for conducting approval test: Vincotte N.V.
Jan Olieslagerslaan 35
1800 Vilvoorde
Belgium
7. Date of test report issued by that Service : 09.01.2018
8. Number of test report issued by that Service: H1760607082/115

9.	Brief description:	See information document
	Category as described by the relevant marking ⁽²⁾ :	HCR PL
	Number and category(ies) of filament lamp(s) :	1×H7 12V, 55W for passing beam 1×H7 12V, 55W for driving beam
	Reference luminous flux used for the principal passing-beam :	1500 lm
	Principal passing-beam operated at approximately :	13.2V
	Measures according to paragraph 5.8. of this Regulation :	§5.8.1.(b)
	Number and specific identification code(s) of LED module(s) and for each LED module a statement whether it is replaceable or not :	Not applicable
	Number and specific identification code(s) of electric light source control gear(s) :	-
	Total objective luminous flux as described in paragraph 5.9. exceeds 2,000 lumens :	Yes / No / Does not apply ⁽¹⁾
	The adjustment of the "cut-off" has been determined at :	10 m/25 m/Does not apply (1)
	The determination of the minimum sharpness of the "cut-off" has been carried out at :	10 m/25 m/Does not apply (1)
10.	Approval mark position :	On the lamp
11.	Reason(s) for extension of approval :	-
12.	Approval granted / extended / refused / withdrawn ⁽¹⁾	

13. Place : Brussels
14. Date : 09.01.2018
15. Signature :

ON BEHALF OF THE SECRETARY-GENERAL:



R. VERHELST

16. 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

(1) Delete where not applicable

(2) Indicate the appropriate marking selected from the list below:

C, C, C, R, R PL, CR, CR, CR, C/R, C/R, C/R, C/, C/, C/.

C, PL, C PL, C PL, CR PL, CR PL, CR PL, C/R PL, C/R PL, C/R PL.

C/PL, C/PL, C/PL

HC, HC, HC, HR, HR PL, HCR, HCR, HCR, HC/R, HC/R, HC/R, HC/, HC/, HC/.

HC PL, HC PL, HC PL, HCR PL, HCR PL, HCR PL, HC/R PL, HC/R PL, HC/R PL.

HC/PL, HC/PL, HC/PL



VINÇOTTE nv

Registered office: Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium

VAT BE 0462.513.222 • RPM/RPR Brussels • BNP Paribas Fortis: BE24 2100 4113 6338 • BIC: GEBABEBB

Jan Olieslagerslaan 35 • 1800 Vilvoorde • Belgium • phone: +32 2 674 57 11 • brussels@vincotte.be

ISO/IEC 17020 Accredited inspection body - Accreditation certificate BELAC No. 016-INSP

1. **SUBJECT : HEADLAMPS**

R112-01

2. **REF. :** Report number : **H1760607082/115** No. of pages : 1 of 35 No. of annexes : -
Bevasys : 201302506 Approval No. : (0378 00) Update : 00

3. **GENERALITIES :**

Make of Device : SONAR

Commercial Type : -

Manufacturer's Type : SK3481-10312 / SK3482-10312

Name and address of the manufacturer :

Sonar Auto Parts Co., Ltd.

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

4. **TESTS :** Date and place : 2017.04.19 to 2017.10.20
SUN-JET VISIBLE LIGHT LABORATORY
Applied document(s) : SONAR SK3481(3482)-10312 / 00
Inspector : LU Wan-Ching
Persons witnessing the tests : LU Wan-Ching
Location of E-mark : On the lamp

5. **CONCLUSIONS :**

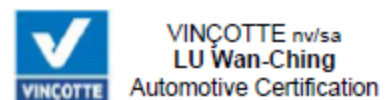
The tests were carried out according to the following specifications :

- UNECE Regulation No. 112 incorporating supplement 7 to the 01 series of amendments.

The models presented comply with the requirements to be applied.

Date : 2018.01.09

Signature :



2BH/LWC-DV

25E-AS

DESCRIPTION OF THE TESTED HEADLAMP

Headlamp type	:	passing beam / driving beam / passing and driving beam
Drive type	:	left hand traffic / right hand traffic / left and right hand traffic
Adjustable reflector	:	yes / no
Headlamp class	:	A / B
Category and kind of light source(s)	:	1×H7 12V, 55W for passing beam 1×H7 12V, 55W for driving beam
Number of light source(s)	:	1 for passing beam 1 for driving beam

GENERAL SPECIFICATIONS

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
<p>The requirements contained in sections 5. "General specifications" and 6. "Individual specifications" and in the Annexes referenced in the said sections of Regulations Nos. 48, 53, 74 or 86, and their series of amendments in force at the time of application for the lamp type approval shall apply to this Regulation.</p> <p>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.</p> <p>Each lamp shall be conform to the specifications of § 6 to § 8.</p> <p>Headlamps shall be so made as to retain their prescribed photometric characteristics and to remain in good working order when in normal use, in spite of the vibrations to which they may be subjected.</p> <p>Headlamps shall be fitted with a device enabling them to be so adjusted on the vehicles as to comply with the rules applicable to them. Such a device need not be fitted on units in which the reflector and the diffusing lens cannot be separated, provided the use of such units is confined to vehicles on which the headlamp setting can be adjusted by other means.</p> <p>Where a headlamp providing a principal passing beam and a headlamp providing a driving beam, each equipped with its own filament lamp or LED module(s), the adjusting device shall enable the principal passing beam and the driving beam to be adjusted individually.</p> <p>However, these provisions shall not apply to headlamp assemblies whose reflectors are indivisible. For this type of assembly the req. of § 6.3. of this Regulation apply.</p>	<p>5.</p> <p>5.1.</p> <p>5.2.</p> <p>5.2.1.</p> <p>5.2.2.</p>	<p>X</p> <p>X</p>	<p>X</p>

SONAR AUTO PARTS CO., LTD.

Head Office:

No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.

Taipei Plant:

No.263, Yingtao Rd. Yingge District,
New Taipei City, Taiwan R.O.C

Tainan Plant:

No. 185, Sec. 1, Jhongshan Rd., Guiren District,
Tainan City, Taiwan, R.O.C.

COMBINATION HEADLAMP

SONAR SK3481-10312 / SK3482-10312 for Right Hand Traffic

Application: original

Date: March 13, 2013

Total number of pages: 8



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



Manufacturer name and address: Sonar Auto Parts Co., Ltd.No. 427, Sec. 2, Wenhua Rd., Panchiao District,
New Taipei City, Taiwan, R.O.C.**Trade name or mark : SONAR****Type of device : SK3481-10312 / SK3482-10312****SPECIFICATIONS****Function-Application-class category lamp and colour**

AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09

Trade name or mark	SONAR				
Function	Headlamp		Front Direction Indicator	Front ⁽¹⁾ Position Lamp	Daytime ⁽¹⁾ Running Lamp
	Driving Beam	Passing Beam			
ECE Regulation	112-01 Supplement 7	112-01 Supplement 7	6-01 Supplement 27	7-02 Supplement 26	87-00 Supplement 19
Class	B	B	-	-	-
Category	-	-	1a	A	-
Number, category and kind of lamp source(s)	1×H7	1×H7	1×PY21W	30LEDs / 1 light source	30LEDs / 1 light source
Voltage and wattage	12V, 55W	12V, 55W	12V, 21W	12V, 3W	12V, 13.5W
Lens	Outer	Clear	Clear	Clear	Clear
	Filter (Inner)	Clear	Clear	Clear	Clear
Colour of light emitted	White	White	Amber	White	White

⁽¹⁾ Front position lamp, which is reciprocally incorporated with daytime running lamp.

TECHNICAL DATA

Part	Material	Remark
Lens	Outer	PC (polycarbonate)
	Filter (Inner)	PC (polycarbonate)
	Filter (Inner) for passing beam and driving beam	Glass
Reflector	PBT+PET+M20% ⁽³⁾	Adjustable
Housing	PP + GF30%	-

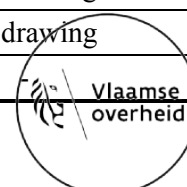
⁽²⁾ The base material of lens: Type number is LEXAN Resin LS2 from GE Advanced Materials.

The hard coating: Type number is UVT 2008 from Shiang Yuan.

⁽³⁾ There are two kinds of sub-reflectors, one is electroplate and the other is black.

MARKING

Marking	Location
Trade name or mark	SONAR
Approval marks	0378
LED module code	-



DRAWINGS	
Reference	Version
SK3481(3482) 10312-1	2017.05.08
SK3481(3482) 10312-2	2017.05.08
SK3481(3482) 10312-3	2017.05.08
SK3481(3482) 10312-4	2017.05.08
SK3481(3482) 10312-5	2017.05.08

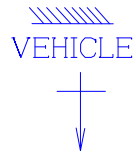
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AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



DRIVING DIRECTION



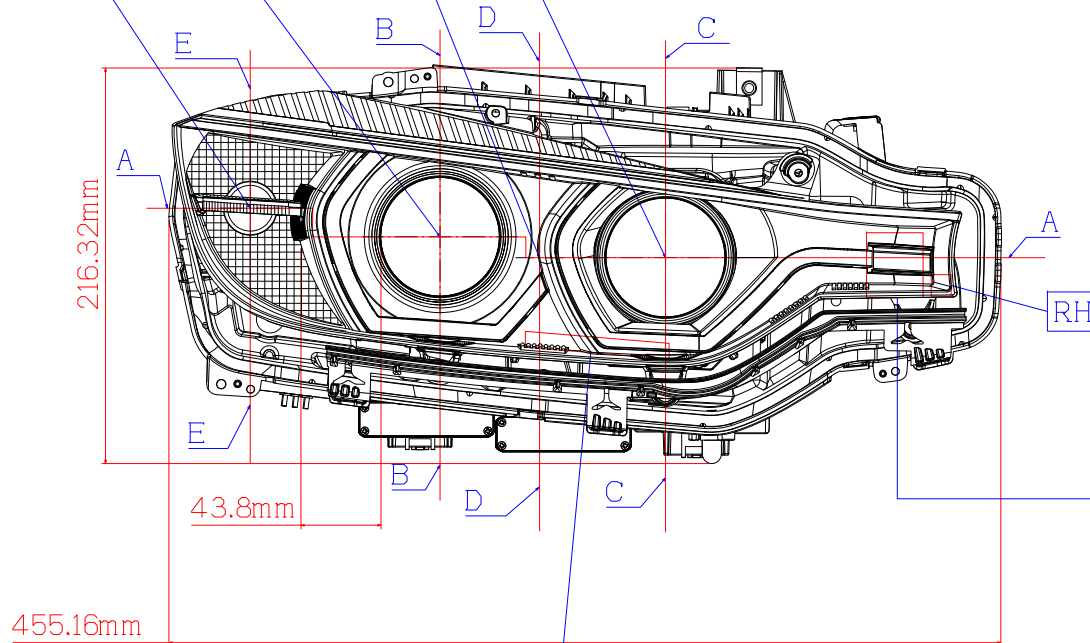
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

CENTER OF REFERENCE (FRONT DIRECTION INDICATOR PY21W 12V21W)

CENTER OF REFERENCE (PASSING BEAM H7 12V55W)

CENTER OF REFERENCE (FRONT POSITION LAMP&DAYTIME RUNNING LAMP 30LED's,12V 3/13.5W)

CENTER OF REFERENCE (DRIVING BEAM H7 12V55W)



RL HCR A 1a (E6) 10 PL
00 01 02 01 0378

FOR LEFT

1a A HCR RL (E6) 10 PL
01 02 01 00 0378

FOR RIGHT

SONAR SK3481 10312

LH SONAR SK3482 10312

UNIT:mm



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09

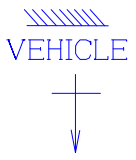


COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-1	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

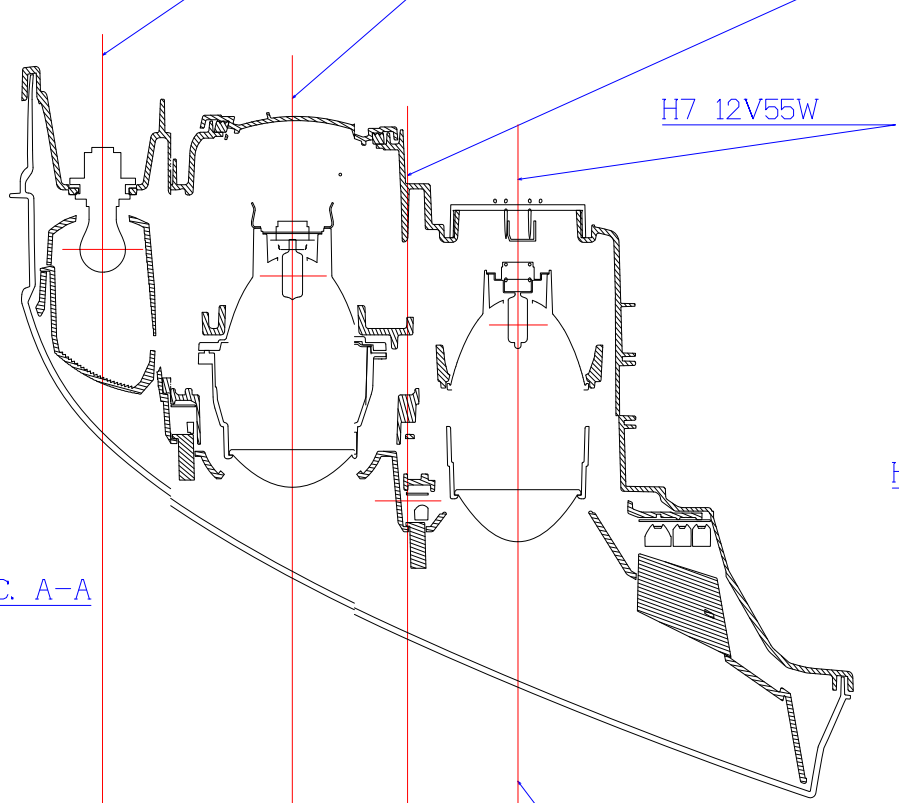
PY21W 12V21W H7 12V55W 30LED's,12V 3/13.5W

DRIVING DIRECTION

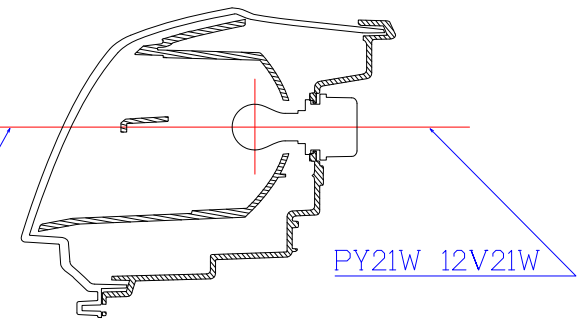
NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY,THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



H7 12V55W



AXIS OF REFERENCE
FRONT DIRECTION INDICATOR
HORIZONTAL PLANE OF VEHICLE



PY21W 12V21W

SEC. A-A

SEC. E-E

DRIVING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

LONGITUDINAL PLANE OF VEHICLE
FRONT POSITION LAMP&DAYTIME RUNNING LAMP
AXIS OF REFERENCE

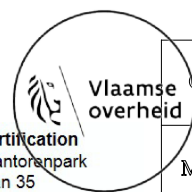
PASSING BEAM
AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE

AXIS OF REFERENCE
LONGITUDINAL PLANE OF VEHICLE
FRONT DIRECTION INDICATOR

UNIT:mm

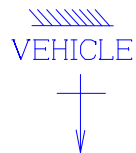


AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



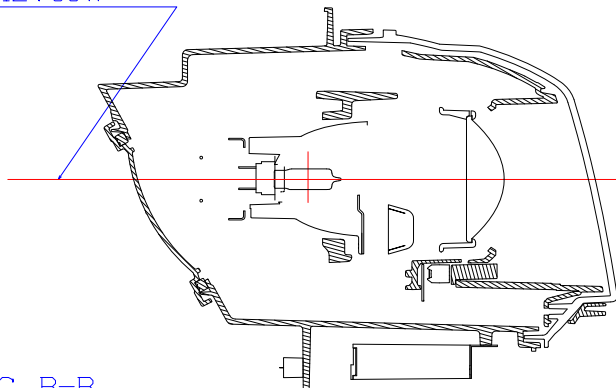
COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-2	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

H7 12V55W

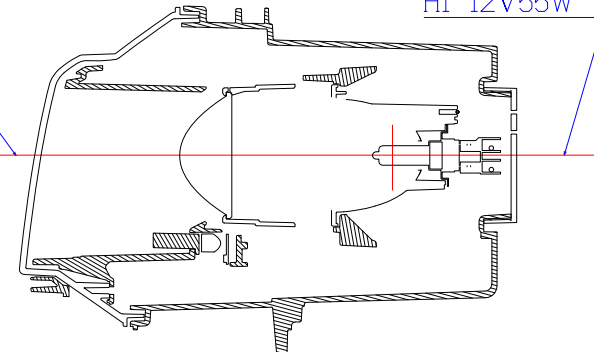


SEC. B-B

DRIVING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

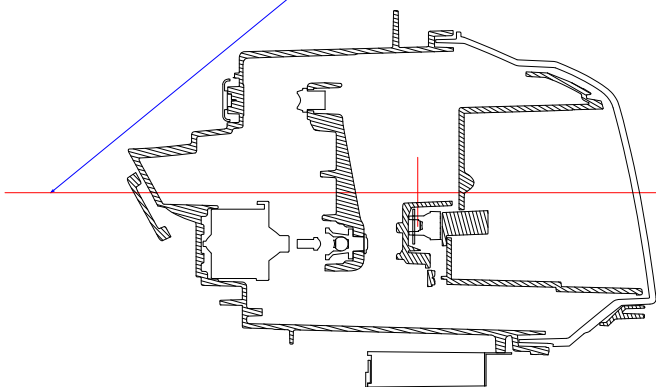
PASSING BEAM
AXIS OF REFERENCE
HORIZONTAL PLANE OF VEHICLE

H1 12V55W



SEC. C-C

30LED's, 12V 3/13.5W



HORIZONTAL PLANE OF VEHICLE
FRONT POSITION LAMP & DAYTIME RUNNING LAMP
AXIS OF REFERENCE

SEC. D-D

UNIT:mm



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



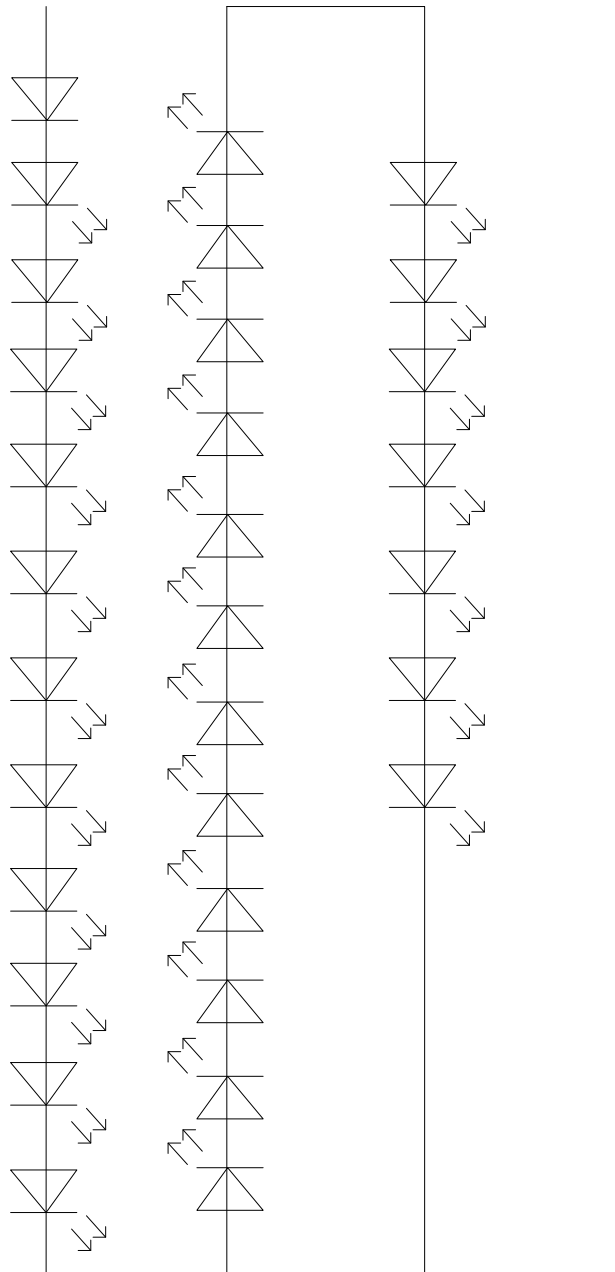
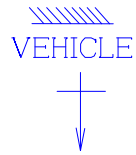
COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-3	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

DRIVING DIRECTION

NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY, THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.

VU

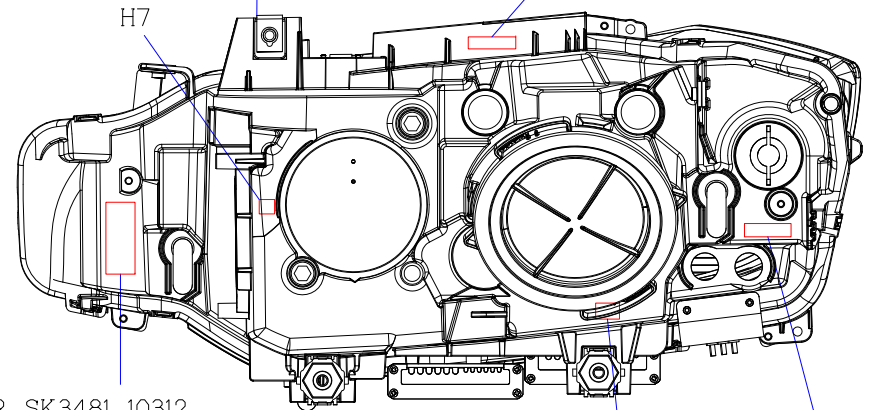
GU



1a A HCR RL (E6) 10 PL
01 02 00 00 0378

SONAR SK3481 10312

12V LED
DRL:13.5W
POS:3W



SONAR SK3481 10312
MADE IN TAIWAN

LENS >PC<
HOUSING >PP+GF30%<
INNER >PC<

12V ~~24V~~

RH

REAR VIEW

UNIT:mm

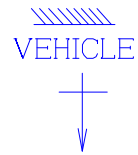


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2018.01.09

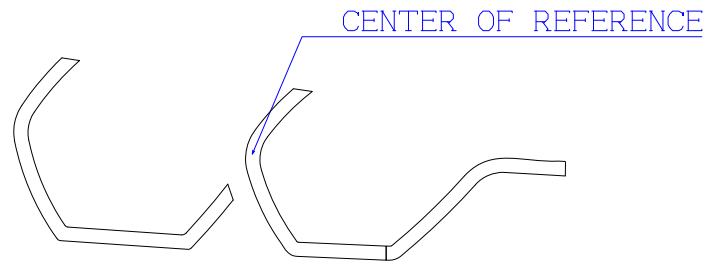
COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-4	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	

CIRCUIT DIAGRAM OF FRONT POSITION LAMP&DAYTIME RUNNING LAMP

DRIVING DIRECTION



NOTE: 1. THIS DRAWING SHALL BE APPLIED FOR RIGHT SIDE ONLY,THE LEFT SIDE SHALL BE SYMMETRICAL
2. THE LENS IS FIXED TO HOUSING BY USING GLUE AND CLIPS.



面積:3849平方mm

ILLUMINATING SURFACE OF FRONT POSITION
LAMP&DAYTIME RUNNING LAMP

UNIT:mm



AUTOMOTIVE certification
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Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2018.01.09



COMPANY	SONAR AUTO PARTS CO., LTD	
MODEL NAME	SK3481(3482) 10312-5	DATE:2017.05.08
FUNCTION	COMBINATION HEAD LAMP	