

**THE NETHERLANDS**  
(N E D E R L A N D)**COMMUNICATION**Concerning <sup>(1)</sup>:

- approval granted
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of reversing lamp/~~manoeuvring lamp~~ <sup>(1)</sup> pursuant to Regulation number 23.**Approval number: E4-23R-0023486****Extension number: 00**

1. Trade name or mark of the device : **CNSAE SAE SAEC**
2. Manufacturer's name for the type of device : SW12249
3. Manufacturer's name and address : Foshan Sunway Auto Electrical Co., Ltd.  
  
No. 8, South Junye Road, Zone C, Shishan Scientific & Technological Park, Nanhai District, Foshan City, Guangdong Province, 528225, P.R. China
4. If applicable, name and address of the manufacturer's representative : Not applicable
5. Submitted for approval on : 17 November 2014
6. Technical service responsible for conducting approval tests : TÜV SÜD Auto Service GmbH  
Westendstraße 199  
D-80686 München
7. Date of report issued by that service : 21 November 2014
8. Number of report issued by that service : 14-00826-CX-SHA-00



9. Concise description
- Number, category and kind of light source(s) : Not applicable (Lamp consists of 4 LEDs)
- Voltage and wattage : 12V / 8W
- Application of an electronic light source control gear:
- (a) Being part of the lamp : ~~yes~~/no<sup>(1)</sup>
- (b) Being not part of the lamp : ~~yes~~/no<sup>(1)</sup>
- Input voltage(s) supplied by an electronic light source control gear : Not applicable
- Electronic light source control gear manufacturer and identification number (when the light source gear is part of the lamp but is not included into the lamp body) : Not applicable
- Light source module : ~~yes~~/no<sup>(1)</sup>
- Light source module specific identification code : Not applicable
- Geometrical conditions of installation and relating variations, if any : Not applicable
- For a type of manoeuvring lamp pursuant to Regulation number 23, paragraph 6.2.2.  
Maximum mounting height : Not applicable
10. Position of the approval mark : On the lens
11. Comments
- In the case of a reversing lamp, this device shall be installed on a vehicle only as a part of a pair of devices : ~~yes~~/no<sup>(1)</sup>
12. Reason(s) for extension (if applicable) : Not applicable
13. Approval : granted/~~extended/refused/withdrawn~~<sup>(1)</sup>



14. Place : Zoetermeer
15. Date : 09-APR-2015
16. Signature :

  
Uwe Löbig



17. The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained on request.  
- Information document: SW12249-00, 3 pages dated 17 November, 2014

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<sup>(1)</sup> Strike out what does not apply.



Technical Report No.: 14-00826-CX-SHA-00  
Manufacturer: Foshan Sunway Auto Electrical Co., Ltd.  
Type: SW12249

# TECHNICAL REPORT

**No.: 14-00826-CX-SHA-00**

Test according to ECE regulation relating to

Reversing lamp

**ECE Regulation No. 23**

Supplement 19 to the 00 series of amendments

Approvals granted up to now		
ECE	Number of approval	Date
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Technical Report No.: 14-00826-CX-SHA-00  
Manufacturer: Foshan Sunway Auto Electrical Co., Ltd.  
Type: SW12249

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## I. Technical description

0.1. Make (trade name of manufacturer) : **CNSAE SAE SAEC**

0.2. Type : SW12249

0.2.1. Variants : N/A

0.3. Means of identification of type : By digits and letters

0.4. Location of the trade mark : On the housing

0.5. Concise description

Category : Reversing lamp

Number, category and kind of light source(s) : N/A (Lamp consists of 4 LEDs)

Voltage and wattage : 12V and 8W

Application of an electronic light source control gear/variable intensity control

Being part of the lamp : No

Being not part of the lamp : No

Input voltage(s) supplied by an electronic light source control gear : N/A

Electronic light source control gear manufacturer and identification number (when the light source gear is part of the lamp but is not included into the lamp body) : N/A

Light source module : No

Light source module specific identification code : N/A

Geometrical conditions of installation and relating variations, if any : See manufacturer's information document

For a type of manoeuvring lamp  
pursuant to Regulation number 23,  
paragraph 6.2.2. Maximum mounting  
height : N/A

0.6. Name and address of manufacturer : Foshan Sunway Auto Electrical Co., Ltd.  
No. 8, South Junye Road, Zone C,  
Shishan Scientific & Technological Park,  
Nanhai District, Foshan City, Guangdong  
Province, 528225, P.R. China

0.8. Name and address of assembly plant : See 0.6.

0.9. Location of the approval mark : On the lens

0.10. If applicable, name and address of the  
manufacturer's representative : N/A

## II. Test record

### 1. Test conditions

1.1. Technical data of the test samples : Two samples are tested.  
For information about the form of the  
lamp, the position of the reference point  
and the reference axis, see information  
document.

1.2. Test procedures used : According to ECE Regulation No.: 23.00.

1.3. Measuring and test equipment : The above equipments on which the tests  
were carried out fulfilled the requirements  
of ECE Regulation No.: 23.00.

1.4. Standard bulb : N/A

Luminous flux : N/A

### 2. Test results

2.1. General Specifications  
Reversing lamps have been designed and constructed that in normal use, despite the  
vibration to which they may then be subjected, they continue to function satisfactorily  
and retain the characteristics prescribed by this regulation.  
No light source module or light generator is used.

2.2. Intensity of light emitted

2.2.1. Sample No. 1, left side mounting, test voltage 13.499V, at HV after 1 minute of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	80.00	300.00	195.61

2.2.1.1. Sample No. 1, left side mounting, test voltage 13.499V, after 30 minutes of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Min.	Max.	
1	10L	10U	10.00	300.00	186.18
2	V	10U	15.00	300.00	190.51
3	10R	10U	10.00	300.00	189.12
4	45R	5U	15.00	300.00	133.88
5	10R	5U	20.00	300.00	188.72
6	V	5U	25.00	300.00	189.63
7	10L	5U	20.00	300.00	185.67
8	45L	5U	15.00	300.00	121.53
9	45L	H	15.00	300.00	119.69
10	30L	H	25.00	300.00	157.15
11	10L	H	50.00	300.00	186.82
12	V	H	80.00	300.00	190.91
13	10R	H	50.00	300.00	189.33
14	30R	H	25.00	300.00	165.96
15	45R	H	15.00	300.00	130.87
16	45R	5D	15.00	600.00	127.67
17	30R	5D	25.00	600.00	167.20
18	10R	5D	50.00	600.00	191.81
19	V	5D	80.00	600.00	193.03
20	10L	5D	50.00	600.00	187.85
21	30L	5D	25.00	600.00	156.76
22	45L	5D	15.00	600.00	117.59
23	All directions above H-H plane		---	300.00	197.95
24	All directions between H-H plane and 5D plane		---	600.00	200.09
25	All directions below 5D plane		---	8000.00	204.46

2.2.1.2. Sample No. 1, intensity of light emitted (LED) after 1 minute  
 -by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.



2.2.1.3. Sample No. 1, left side mounting, test voltage 13.499V, at HV after 1 minute of operation-failed mode.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	80.00	300.00	94.71

2.2.2.4. Sample No. 1, left side mounting, test voltage 13.499V, after 30 minutes of operation-failed mode.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Min.	Max.	
1	10L	10U	10.00	300.00	87.51
2	V	10U	15.00	300.00	89.57
3	10R	10U	10.00	300.00	88.72
4	45R	5U	15.00	300.00	63.49
5	10R	5U	20.00	300.00	87.01
6	V	5U	25.00	300.00	87.65
7	10L	5U	20.00	300.00	85.63
8	45L	5U	15.00	300.00	58.51
9	45L	H	15.00	300.00	55.70
10	30L	H	25.00	300.00	73.36
11	10L	H	50.00	300.00	86.07
12	V	H	80.00	300.00	87.50
13	10R	H	50.00	300.00	87.01
14	30R	H	25.00	300.00	76.94
15	45R	H	15.00	300.00	60.62
16	45R	5D	15.00	600.00	56.65
17	30R	5D	25.00	600.00	77.15
18	10R	5D	50.00	600.00	89.09
19	V	5D	80.00	600.00	89.71
20	10L	5D	50.00	600.00	87.12
21	30L	5D	25.00	600.00	72.28
22	45L	5D	15.00	600.00	53.72
23	All directions above H-H plane		---	300.00	92.59
24	All directions between H-H plane and 5D plane		---	600.00	100.17
25	All directions below 5D plane		---	8000.00	107.38

2.2.1.5. Sample No. 1, intensity of light emitted (LED) after 1 minute-failed mode  
 -by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.



2.2.2. Sample No. 2, right side mounting, test voltage 13.499V, at HV after 1 minute of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	80.00	300.00	186.89

2.2.2.1. Sample No. 2, right side mounting, test voltage 13.499V, after 30 minutes of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Min.	Max.	
1	10L	10U	10.00	300.00	178.35
2	V	10U	15.00	300.00	180.95
3	10R	10U	10.00	300.00	179.36
4	45R	5U	15.00	300.00	128.27
5	10R	5U	20.00	300.00	181.18
6	V	5U	25.00	300.00	182.91
7	10L	5U	20.00	300.00	178.21
8	45L	5U	15.00	300.00	110.42
9	45L	H	15.00	300.00	109.22
10	30L	H	25.00	300.00	145.04
11	10L	H	50.00	300.00	177.13
12	V	H	80.00	300.00	181.29
13	10R	H	50.00	300.00	180.11
14	30R	H	25.00	300.00	158.75
15	45R	H	15.00	300.00	127.84
16	45R	5D	15.00	600.00	124.75
17	30R	5D	25.00	600.00	158.94
18	10R	5D	50.00	600.00	181.44
19	V	5D	80.00	600.00	183.14
20	10L	5D	50.00	600.00	178.50
21	30L	5D	25.00	600.00	143.57
22	45L	5D	15.00	600.00	105.99
23	All directions above H-H plane		---	300.00	183.22
24	All directions between H-H plane and 5D plane		---	600.00	188.04
25	All directions below 5D plane		---	8000.00	194.96

2.2.2.2. Sample No. 2, intensity of light emitted (LED) after 1 minute.

-by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.

2.2.2.3. Sample No. 2, right side mounting, test voltage 13.499V, at HV after 1 minute of operation-failed mode.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	80.00	300.00	91.75

2.2.2.4. Sample No. 2, right side mounting, test voltage 13.499V, after 30 minutes of operation-failed mode.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Min.	Max.	
1	10L	10U	10.00	300.00	86.95
2	V	10U	15.00	300.00	87.81
3	10R	10U	10.00	300.00	87.27
4	45R	5U	15.00	300.00	63.28
5	10R	5U	20.00	300.00	87.78
6	V	5U	25.00	300.00	88.60
7	10L	5U	20.00	300.00	86.08
8	45L	5U	15.00	300.00	57.69
9	45L	H	15.00	300.00	55.92
10	30L	H	25.00	300.00	72.45
11	10L	H	50.00	300.00	84.06
12	V	H	80.00	300.00	86.53
13	10R	H	50.00	300.00	86.10
14	30R	H	25.00	300.00	76.13
15	45R	H	15.00	300.00	63.01
16	45R	5D	15.00	600.00	59.35
17	30R	5D	25.00	600.00	76.05
18	10R	5D	50.00	600.00	85.56
19	V	5D	80.00	600.00	86.04
20	10L	5D	50.00	600.00	84.27
21	30L	5D	25.00	600.00	71.33
22	45L	5D	15.00	600.00	53.11
23	All directions above H-H plane		---	300.00	90.57
24	All directions between H-H plane and 5D plane		---	600.00	96.01
25	All directions below 5D plane		---	8000.00	102.26

2.2.2.5. Sample No. 2, intensity of light emitted (LED) after 1 minute-failed mode  
 -by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.

2.3. Colour - White

Sample	Measured values		Limits
	x	y	
			W12 green boundary: $y = 0.150 + 0.640 x$ W23 yellowish green boundary: $y = 0.440$ W34 yellow boundary: $x = 0.500$ W45 reddish purple boundary: $y = 0.382$ W56 purple boundary: $y = 0.050 + 0.750 x$ W61 blue boundary: $x = 0.310$
No. 1	0.3270	0.3291	Complies
No. 2	0.3291	0.3297	Complies

2.4. Apparent surface

Upper boundary "U" (mm)	Down boundary "D" (mm)	Inner boundary "I" (mm)	Outer boundary "O" (mm)
26	26	30	30

3. Specimen submitted to test on: 17.11.2014 (DD.MM.YYYY)
4. Place of test: JSHC, Zhenjiang, P.R. China
- Date of test: 20.11.2014 (DD.MM.YYYY)

III. **Enclosures**

Manufacturer's information document

No.: SW12249-00

Dated on: 17.11.2014 (DD.MM.YYYY)

#### IV. Statement of conformity

The information folder as mentioned under No. III and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".

The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.

München, 21.11.2014

(DD.MM.YYYY)



Gu, Qing

Test Laboratory / DIN EN ISO 17025

Genehmigungsbehörde/ Approval authority	Land/Country	Registriernummer/ Registration-number	Aktueller Benennungsumfang/ Actual scope list
Kraftfahrt-Bundesamt (KBA)	Deutschland/ Germany	KBA-P 00100-10	www.kba.de
Vehicle Certification Agency (VCA)	Vereintes Königreich/ United Kingdom	VCA-TS-006	http://ec.europa.eu/enterprise/se ctors/automotive/approval- authorities-technical- services/technical- services/index_en.htm
Approval Authority of the Netherlands (RDW)	Niederlande/ The Netherlands	RDW-99050009 01	
National Standards Author- ity of Ireland (NSAI)	Irland/ Ireland	Technical Service Number: 49	
Vehicle Safety Certification Center (VSCC)	Taiwan/ Taiwan	DE04-06-1	<a href="http://www.vsc.org.tw/English/Default.aspx">http://www.vsc.org.tw/English/Default.aspx</a>



Foshan Sunway Auto Electrical Co., Ltd.  
No. 8, South Junye Road, Zone C, Shishan  
Scientific & Technological Park, Nanhai District,  
Foshan City, Guangdong Province, 528225, P.R. China

November 17, 2014

Dear Sirs,

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

Function	ECE approval number
Reversing lamp	E4-23R-0023486

Trade name or mark	: CNSAE SAE SAEC
Manufacturer's name for type of device	: SW12249
Name and address of manufacturer	: Foshan Sunway Auto Electrical Co., Ltd. No. 8, South Junye Road, Zone C, Shishan Scientific & Technological Park, Nanhai District, Foshan City, Guangdong Province, 528225, P.R. China

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

Sincerely



Mr. Zhang Dong  
Foshan Sunway Auto Electrical Co., Ltd.



Information folder No. : SW12249-00  
 First application date : November 17, 2014

1. Specification data

Type		SW12249
Function		Reversing lamp
Color		White
Rated	Voltage	12V
	Wattage	8W
Application Regulation ECE		R23.00 AR
Location of marking	Number and category of light source	4*LED Non-replaceable light source
		Marked on housing
	Trade mark	<b>CNSAE SAE SAEC</b>
		Marked on housing
Approval mark	Marked on lens	

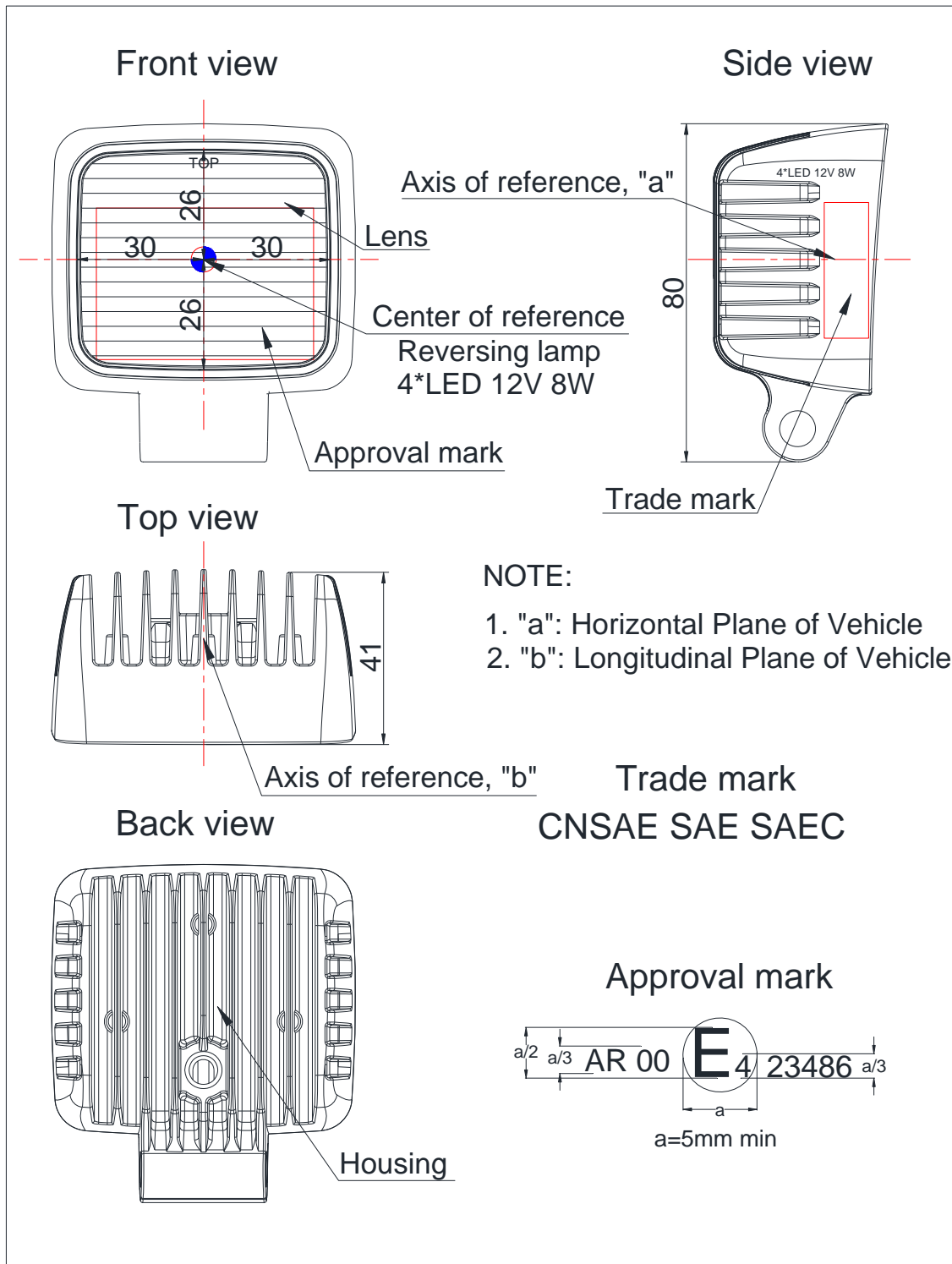
2. Construction and material

Construction	Material	Remarks
Lens	PC	Reversing lamp: Clear
Reflector	--	--
Housing	ADC 12	--
Electrical Wiring	Copper covered with insulation	--

3. Name and address of manufacturer : Foshan Sunway Auto Electrical Co., Ltd.  
 No. 8, South Junye Road, Zone C, Shishan  
 Scientific & Technological Park, Nanhai District,  
 Foshan City, Guangdong Province, 528225, P.R. China

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



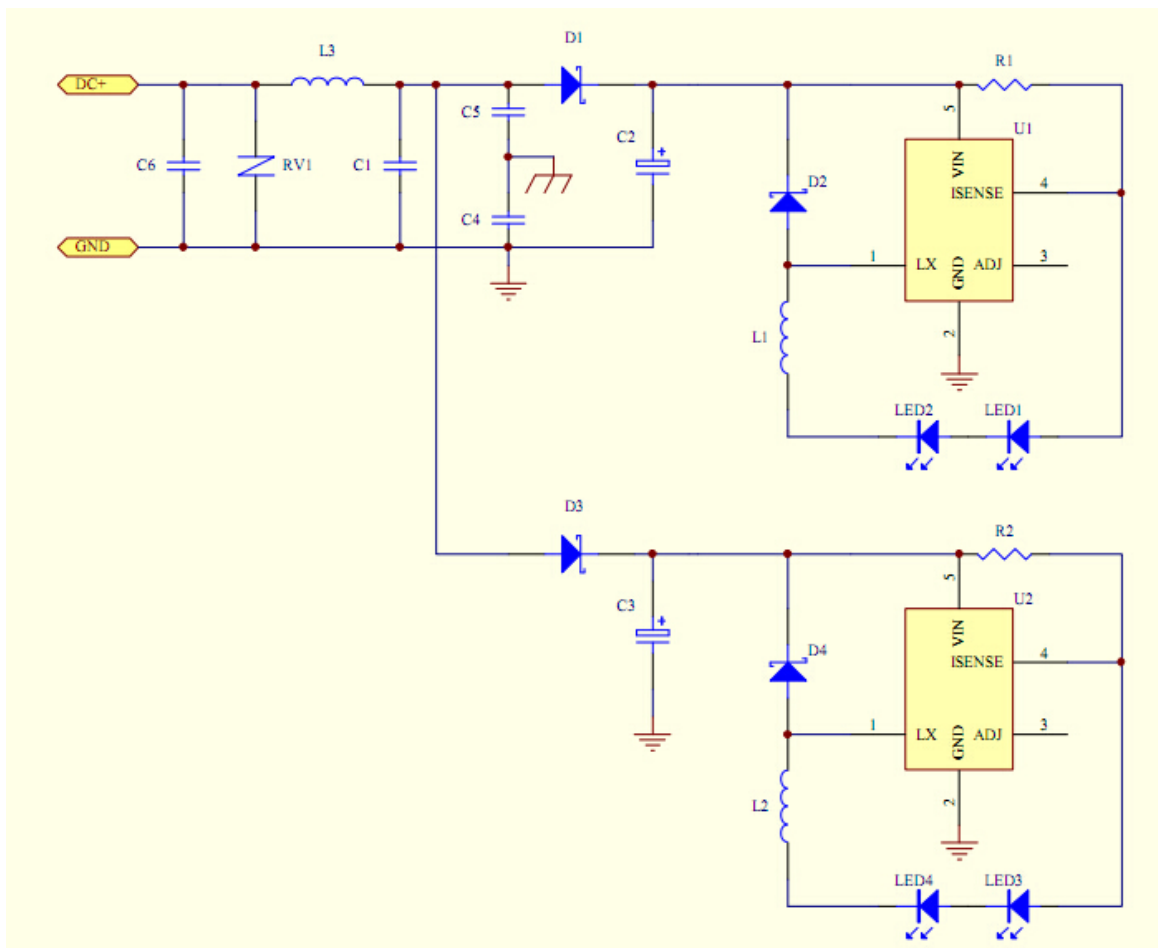


Product Type	SW12249
General assembly drawing	
Drawing No.	SW12249-00



Reversing lamp

4\*LED 12V 8W



Product Type	SW12249
The light source controller schematic	
Drawing No.	SW12249-02

