

**THE NETHERLANDS
(N E D E R L A N D)****COMMUNICATION**

Concerning ⁽¹⁾:


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- ~~approval withdrawn~~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

of a type of retro-reflecting device pursuant to Regulation number 3.

Approval number: E4*3R02/17*26489*00

1. Trade name or mark of the device : SCI
2. Manufacturer's name for the type of device : C2-7121A
3. Manufacturer's name and address : Shin Chin Industrial Co. Ltd.
128 Cheng Pei 1st Road Yung Kang Dist.
TAINAN CITY,
71042 Taiwan (ROC)
4. If applicable, name and address of the manufacturer's representative : N/A
5. Submitted for approval on : 2018-06-12
6. Technical service responsible for conducting approval tests : TÜV SÜD Auto Service GmbH
Westendstraße 199
D-80686 München
7. Date of test report : 2018-08-22
8. Number of test report : 18-01632-CX-SHA-00
9. Concise description

Approval number: E4*3R02/17*26489*00

- In ~~isolation~~/part of an assembly of devices⁽¹⁾ : In part of an assembly of devices
- Colour of light emitted : ~~white/red~~/amber⁽¹⁾
- Installation as an integral part of a lamp which is integrated into the body of a vehicle : ~~yes~~/no⁽¹⁾
- Geometric conditions of installation and relating variations, if any : See manufacturer's information document
- Only for limited mounting height of equal to or less than 750 mm above the ground : ~~yes~~/no⁽¹⁾
10. Position of the approval mark : On the lens
11. Reason(s) for extension (if applicable) : N/A
12. Approval : granted/~~refused/extended/withdrawn~~⁽¹⁾
13. Place : Zoetermeer
14. Date : 12-SEP-2018
15. Signature : 
Uwe Löbig
16. The following documents, bearing the approval number shown above, are available on request:
– Information document No.: C2-7121A-00, dated on 2018-06-12.

⁽¹⁾ Strike out what does not apply.



Technical Report No.: 18-01632-CX-SHA-00
Manufacturer: Shin Chin Industrial Co. Ltd
Type: C2-7121A

TECHNICAL REPORT

No.: 18-01632-CX-SHA-00

Test according to ECE regulation relating to

Side retro reflector Class IB

ECE Regulation No.: 3

supplement 17 to the 02 series of amendments

Approvals granted up to now		
ECE	Number of approval	Date
	---	---



Technical Report No.: 18-01632-CX-SHA-00
Manufacturer: Shin Chin Industrial Co. Ltd
Type: C2-7121A

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I. Technical description

- 0.1. Make (trade name of manufacturer) : SCI
- 0.2. Type : C2-7121A
- 0.2.1. Variants : N/A
- 0.3. Means of identification of type : By digits and letters
- 0.4. Concise description
- Category : Side retro reflector Class IB
- In isolation/part of an assembly of devices : In part of an assembly of devices
- Colour of light emitted : Amber
- Installation as an integral part of a lamp which is integrated into the body of a vehicle : Yes
- Geometrical conditions of installation and relating variations, if any : See manufacturer's information document
- Only for limited mounting height of equal to or less than 750 mm above the ground : No
- 0.5. Name and address of manufacturer : Shin Chin Industrial Co. Ltd
128 Cheng Pei 1st Road Yung Kang Dist.
TAINAN CITY, 71042 Taiwan (ROC)
- 0.6. Address of assembly plant : N/A
- 0.7. Location of the approval mark : On the lens
- 0.8. 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 : Ten samples were tested.
Marking:
Sample No. 1 to No. 10.





Technical Report No.: 18-01632-CX-SHA-00
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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.: 3.02.
- 1.3. Measuring and test equipment : Full automatic photometric test system for automobile lamps
LMT Lichtmesstechnik GmbH Berlin
Type GO H1400
2. Test results : Refer to Annex 1
3. Specimen submitted to test on : 2018-06-12 (YYYY-MM-DD)
4. Place of test : ISOQA Technical Service Co., Ltd,
Taichung City, Taiwan, ROC
- Date of test : 2018-06-13 to 2018-07-11 (YYYY-MM-DD)

III. Enclosures

- Manufacturer's information document No. : C2-7121A-00
- Dated on : 2018-06-12 (YYYY-MM-DD)





Technical Report No.: 18-01632-CX-SHA-00
 Manufacturer: Shin Chin Industrial Co. Ltd
 Type: C2-7121A

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, 2018-08-22
 (YYYY-MM-DD)



Henry Chen

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/sectors/automotive/approval-authorities-technical-services/technical-services/index_en.htm
Approval Authority of the Netherlands (RDW)	Niederlande/ The Netherlands	RDWT-082-XX	
National Standards Authority of Ireland (NSAI)	Irland/ Ireland	Technical Service Number: 49	
Vehicle Safety Certification Center (VSCC)	Taiwan/ Taiwan	DE04-06-2	http://www.vsc.org.tw/English/Default.aspx



Type : C2-7121A
Manufacturer : Shin Chin Industrial Co. Ltd.

Annex 1

TEST REPORT

Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations

Uniform provisions concerning the approval of retro-reflecting devices for power-driven vehicles and their trailers.

Tested according ECE-R3, supplement 17 to the 02 series of amendments of 10 October 2017

Kind of device: Retro-reflective devices, Class IB

Approval status	
X	Application for granting of a type approval
	Application for an extension of type approval No.
	Reason for the extension:



Test Report No. : ISOQA-18-0246-R3

Type : C2-7121A
Manufacturer : Shin Chin Industrial Co. Ltd.



ISOQA Technical Service Co., Ltd.
Web: www.isoqa.org
E-mail: isoqa@isoqa.org

0. General

- 0.1. Make (trade name of manufacturer) : SCI
- 0.2. Type : C2-7121A
- 0.3. Class of the connecting device : IB
- 0.4. Manufacturer's name and address : Shin Chin Industrial Co. Ltd.
128 Cheng Pei 1st Road Yung Kang Dist. TAINAN CITY, 71042
Taiwan (ROC)
- 0.5. Test laboratory : ISOQA Technical Service Co., Ltd.
60, Yong Long Road,
41257 Da-Li, Taichung
Taiwan



Type : C2-7121A
Manufacturer : Shin Chin Industrial Co. Ltd.

1. Test object (s)

1.1. Information :

Material of Lens	Plastic	
Material of Housing	Plastic	
Material of Retro Reflector	Plastic	
Retro-reflective devices	Category	IB
	Color of light emitted	Amber
	Color of lens	Amber
	Grouped with	Side Marker lamp
	Combined with	--
	Incorporated with	--

1.2. Location of Marking :

1.3. Remark(s) :

- 1.3.1. There are no objections against the variants that may be described in the Information folder respectively the information document by the manufacturer because adversely effects are not expected.
The reflex reflector are part of the same assembly of grouped, combined or reciprocally incorporated lamps. Each of these lamps satisfies the requirements of the relevant regulation.
- 1.3.2. The applicant has indicated two mounting positions of this device, Horizontal mounting type and Vertical mounting type, detailed information are presented in the drawing.
All the tests were performed with worst case (Horizontal mounting type).



Type : C2-7121A
Manufacturer : Shin Chin Industrial Co. Ltd.

2. Test Specification

- 2.1. Place of test : Laboratory of ISOQA in Taiwan
- 2.2. Date of test : 2018/6/13 ~ 2018/7/11
- 2.3. Date of receipt of test device(s) : 2018/6/13

2.4. Test results

2.4.1. Markings (according to paragraph 4 of ECE R3-02)

- | | | |
|---|----------------|----------------|
| a. trade name or mark | Complies | see Appendix 2 |
| b. the word "TOP" inscribed on the highest part of the illuminating surface | Not Applicable | |
| c. Space reserved for the approval mark | Complies | see Appendix 2 |

2.4.2. General Specifications (according to paragraph 6 of ECE R3-02)

- | | | |
|--|----------------|--|
| a. conformity of specifications | Complies | |
| b. not be capable of being easily dismantled | Complies | |
| c. may not be replaceable | Complies | |
| d. The means of fixation of Class IVA | Not Applicable | |

2.4.3. Special Specifications (according to paragraph 7 of ECE R3-02)

- | | | |
|--|----------------|-------------------|
| a. Specifications of Shape and Dimensions | Complies | see Appendix 2 |
| b. Colorimetric Specifications | Complies | see 3.1 and 3.3 |
| c. Photometric Specifications | Complies | see 3.1 and 3.2 |
| d. Resistance to External Agents | Complies | see 3.1 |
| e. Stability in Time of the Optical Properties | Not Applicable | see 2.5.1 and 3.1 |
| f. Resistance to Heat | Complies | see 3.1 |
| g. Colour-Fastness | Not Applicable | see 2.5.2 and 3.1 |
| h. Resistance to Impact - Class IVA | Not Applicable | |

2.5. Remark (s)

- 2.5.1. The authority shall have the right to check the stability in time of the optical properties of the reflex reflector
- 2.5.2. The authority shall have the right to check the colour-fastness of the reflex reflector



Type : C2-7121A
 Manufacturer : Shin Chin Industrial Co. Ltd.

3. Performance test(s)

3.1. Chronological order of tests

Order	Test	Samples / Result ⁽¹⁾									
		max min		Group 1		Group 2		Group 3		Group 4	
		c.	j.	h.	i.	e.	g.	a.	b.	d.	f.
1.	General specifications: visual inspection	P	P	P	P	P	P	P	P	P	P
2.	Shapes and dimensions: visual inspection	P	P	P	P	P	P	P	P	P	P
3.	Heat: Visual inspection for distortion	P	P	P	P	P	P	P	P	P	P
4.	Colourimetry: visual inspection	P	P	P	P	P	P	P	P	P	P
	Trichromatic coordinates in case of doubt ⁽³⁾	P	P	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5.	Photometry: limited to 20' and V = H = 0° ⁽²⁾	945	765	843	852	835	843	766	823	781	800
6.	Complete photometry ⁽⁴⁾	P	P								
7.	Moisture test			P	P						
	- Colorimetry: visual inspection			P	P						
	- Trichromatic coordinates in each case of doubt			N/A	N/A						
	- Photometry: limited to 20' and V = H = 0° ⁽²⁾			874	850						
	Dust exposure test			P	P						
	- Colorimetry: visual inspection			P	P						
	- Trichromatic coordinates in each case of doubt			N/A	N/A						
	- Photometry: limited to 20' and V = H = 0° ⁽²⁾			809	819						
8.	Motor fuels: visual inspection			P	P						
	Oils: Visual inspection			P	P						
	- Colorimetry: visual inspection			P	P						
	- Trichromatic coordinates in each case of doubt			N/A	N/A						
	- Photometry: limited to 20' and V = H = 0° ⁽²⁾			799	785						



Type : C2-7121A
 Manufacturer : Shin Chin Industrial Co. Ltd.

Order	Test	Samples / Result ⁽¹⁾									
		max	min	Group 1		Group 2		Group 3		Group 4	
		c.	j.	h.	i.	e.	g.	a.	b.	d.	f.
9.	Corrosion: Visual inspection					P	P				
	- Colorimetry: visual inspection					P	P				
	- Trichromatic coordinates in each case of doubt					N/A	N/A				
	- Photometry: limited to 20' and V = H = 0° ⁽²⁾					837	767				
10	Rear Face: Visual inspection ⁽⁵⁾					N/A	N/A				
11	Stability in Time ⁽⁶⁾							N/A	N/A		
	- Colorimetry: visual inspection							N/A	N/A		
	- Trichromatic coordinates in each case of doubt							N/A	N/A		
	- Photometry: limited to 20' and V = H = 0°							N/A	N/A		
12	Colour-fastness ⁽⁷⁾									N/A	N/A
	- Colorimetry: Visual inspection or trichromatic coordinates									N/A	N/A
										N/A	N/A
	- Photometry: limited to 20' and V = H = 0°									N/A	N/A
13	Deposit of samples with administration	P	P								

⁽¹⁾ P = PASS, F = FAILED, N/A = NOT APPLICABLE

⁽²⁾ Minimum = 750 (mcd/lx)

⁽³⁾ see 3.3.

⁽⁴⁾ see 3.2.1

⁽⁵⁾ Non Mirror-backed retro-reflecting devices

⁽⁶⁾ Despite the importance of tests to check the stability in time of the optical properties of retro-reflecting devices, it is in the present state of the art not yet possible to assess this stability by laboratory tests of limited duration.

⁽⁷⁾ Despite the importance of tests to check the colour-fastness of retro-reflecting devices, it is in the present state of the art not yet possible to assess colour-fastness by laboratory tests of limited duration.



Test Report No. : ISOQA-18-0246-R3

Type : C2-7121A
 Manufacturer : Shin Chin Industrial Co. Ltd.



ISOQA Technical Service Co., Ltd.
 Web: www.isoqa.org
 E-mail: isoqa@isoqa.org

3.2. Photometric Specifications

Category : IB Test Distance : 30.479 m

3.2.1. Complete photometry - Max & Min

Angle of divergence α	Point	Minimum (mcd/lx)	Max	Min
			Sample: c.	Sample: j.
20'	H - V	750.00	923.00	765.00
	H - 10U	500.00	825.00	793.00
	H - 10D	500.00	777.00	673.00
	20L - 5U	250.00	389.00	368.00
	20R - 5U	250.00	526.00	516.00
	20L - 5D	250.00	369.00	316.00
	20R - 5D	250.00	535.00	567.00
1.30'	H - V	12.50	72.10	71.50
	H - 10U	7.00	44.70	52.50
	H - 10D	7.00	37.40	39.00
	20L - 5U	6.25	41.70	45.50
	20R - 5U	6.25	50.10	53.90
	20L - 5D	6.25	40.80	41.10
	20R - 5D	6.25	56.50	58.40
Result			PASS	PASS

3.3. Color of light emitted - Max & Min

Function (s)	Color of light emitted	Sample: c.		Sample: j.		Result
		x	y	x	y	
Retro-reflective devices	Amber	0.5927	0.4014	0.5952	0.3996	PASS



Test Report No. : ISOQA-18-0246-R3

Type : C2-7121A
Manufacturer : Shin Chin Industrial Co. Ltd.

ISOQA

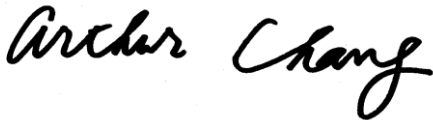
ISOQA Technical Service Co., Ltd.
Web: www.isoqa.org
E-mail: isoqa@isoqa.org

4. Statement of conformity

The information folder respectively information document by the manufacturer and the type described therein are in compliance with the Test Specification mentioned above.

ISOQA Technical Service Co., Ltd.

Signature



Laboratory Manager - Chih-Hua Chang

Date : 2018/8/14



Information folder No. : C2-7121A-00

First application date : June 12, 2018

1. Specification data

Type		C2-7121A	
Function		Side marker lamp with Retro-reflector	
		Side marker	Retro-reflector
		SM1	IB
Color		Amber	Amber
Rated	Voltage	Variant A:12V Variant B:12 V /24 V	N/A
	Wattage	Variant A :1.0 W Variant B 1.0 W/1.9 W	N/A
Application Regulation ECE		R91	R3
Location of marking	Number and category of light source	4*LED	N/A
		Non-replaceable light source	N/A
		On the housing (voltage)	N/A
	Trade mark	SCI	
		Marked on Lens	
Approval mark	Marked on Lens		
The lamp is only for use on a vehicle fitted with a tell-tale indicating failure		No	
Remark		N/A	

2. Construction and material

Construction	Material	Remarks
Outer lens	PMMA	Amber (with pattern)--Reflector
Light guide	PMMA	Colorless (Side marker)
Housing 1	ABS	Colour: white

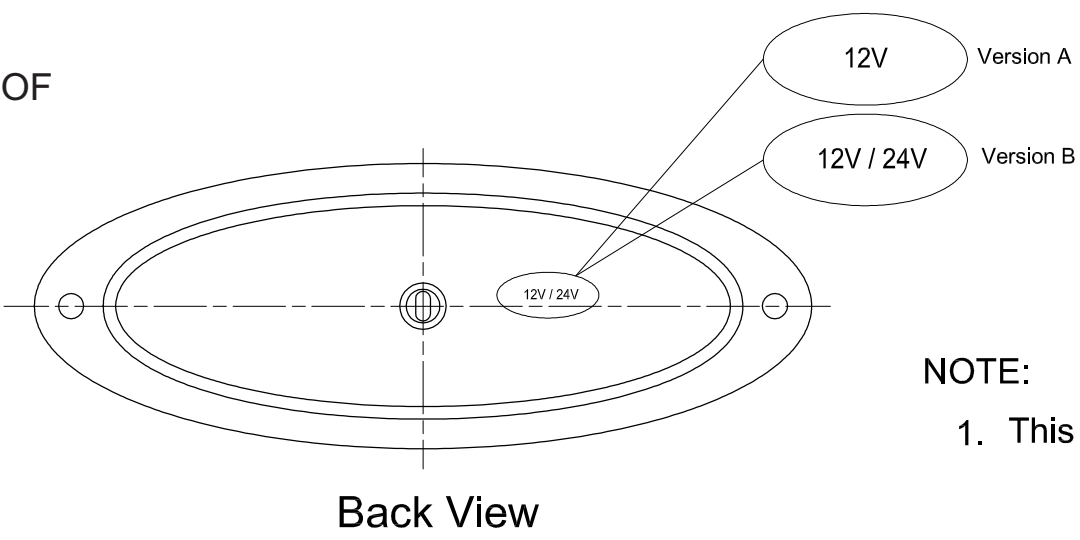
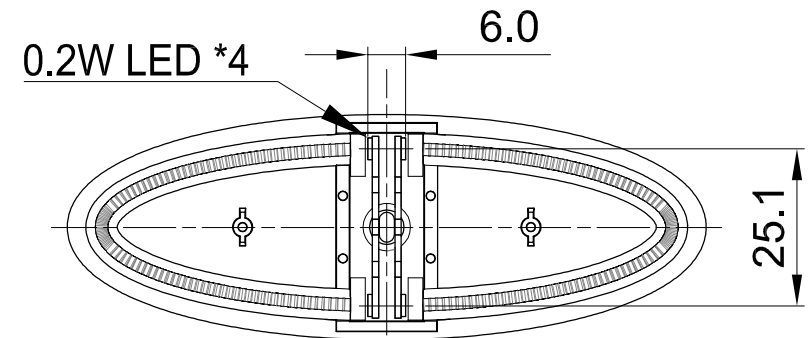
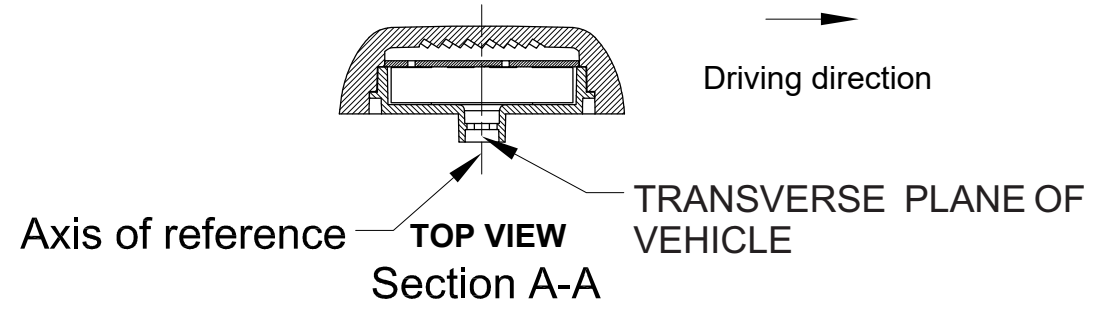
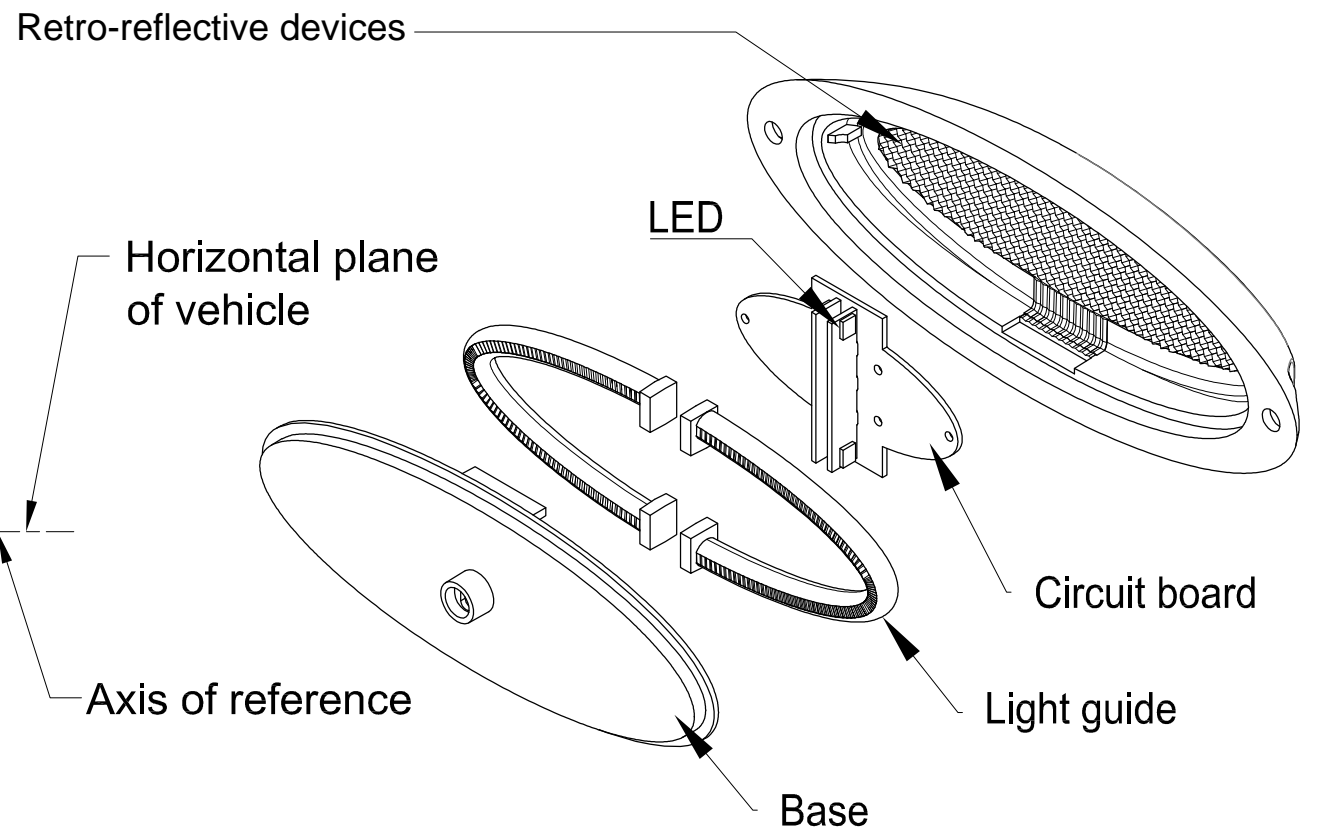
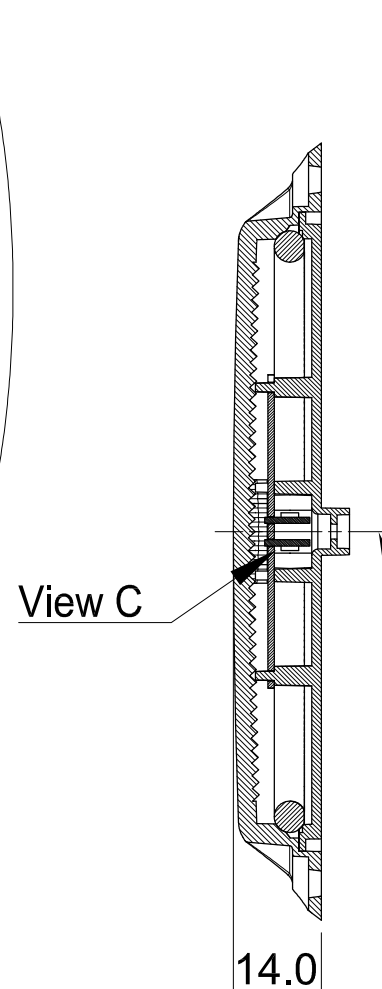
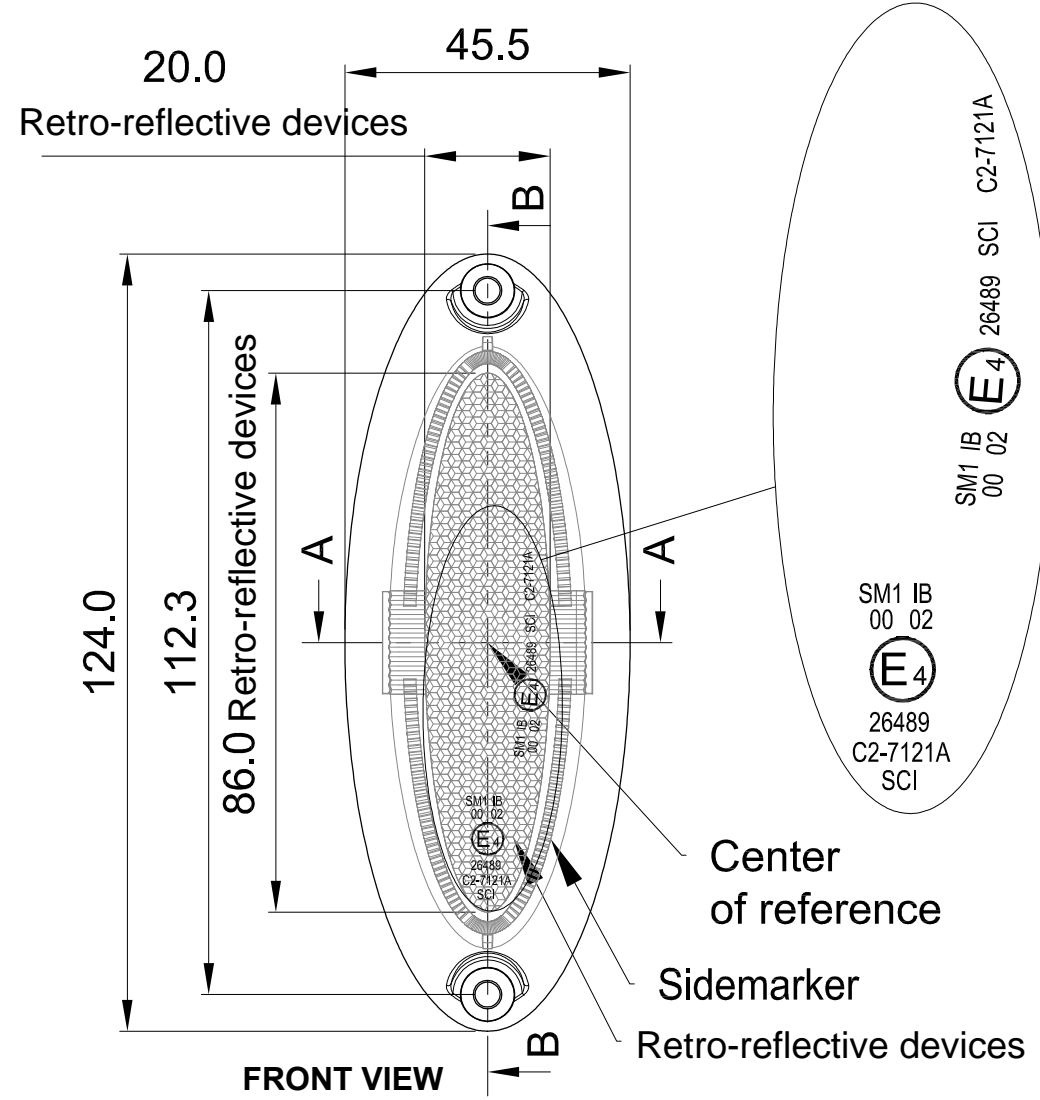
3. Name and address of manufacturer : Shin Chin Industrial Co. Ltd.
128 Cheng Pei 1st Road Yung Kang Dist. TAINAN CITY,
71042 Taiwan (ROC)

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

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



Vertical mounting type



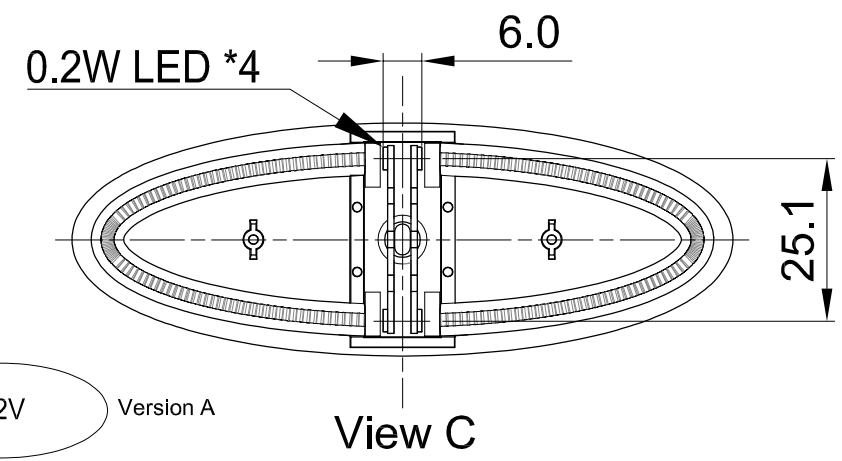
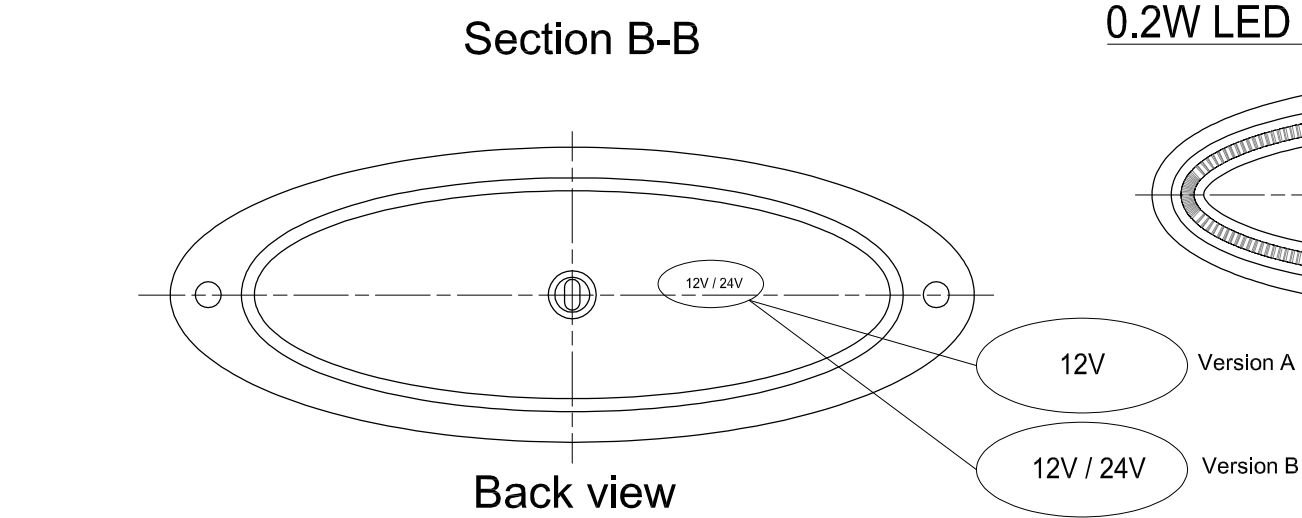
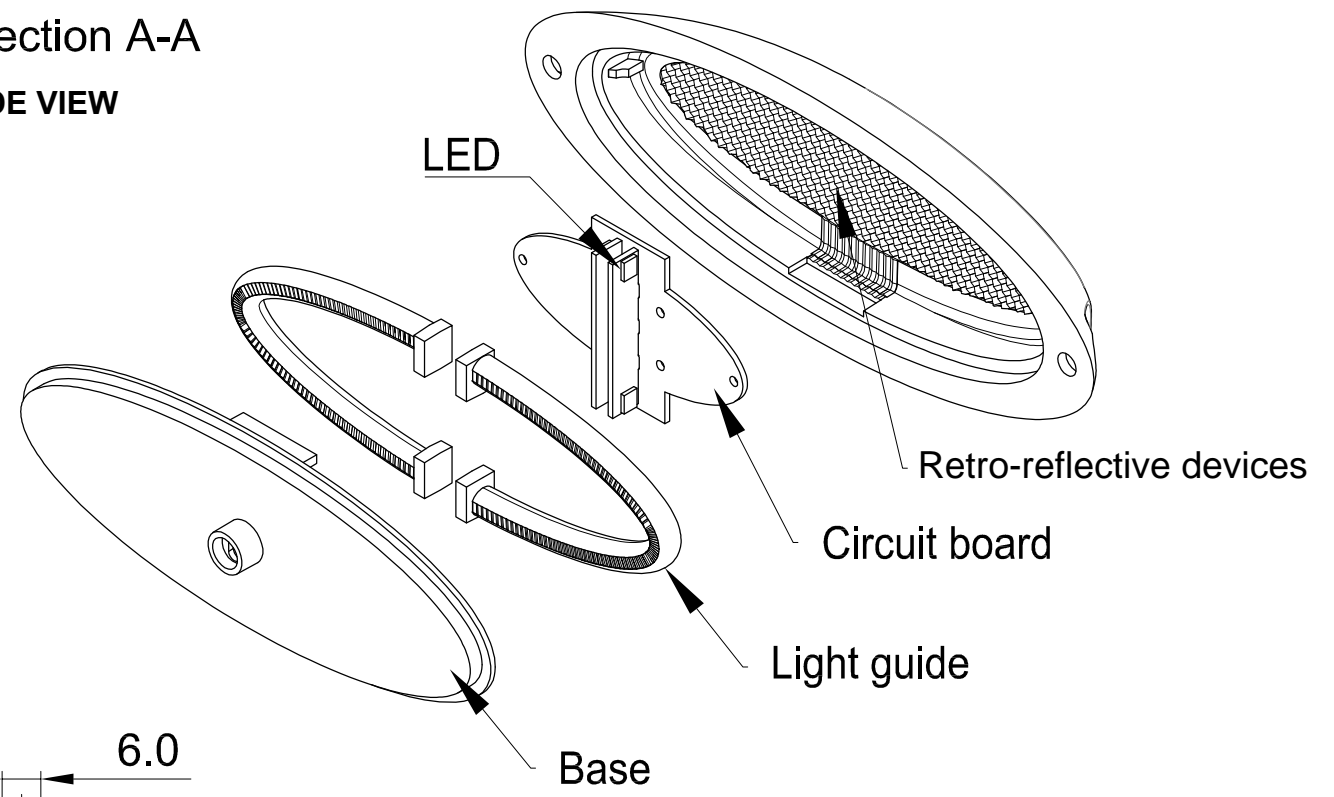
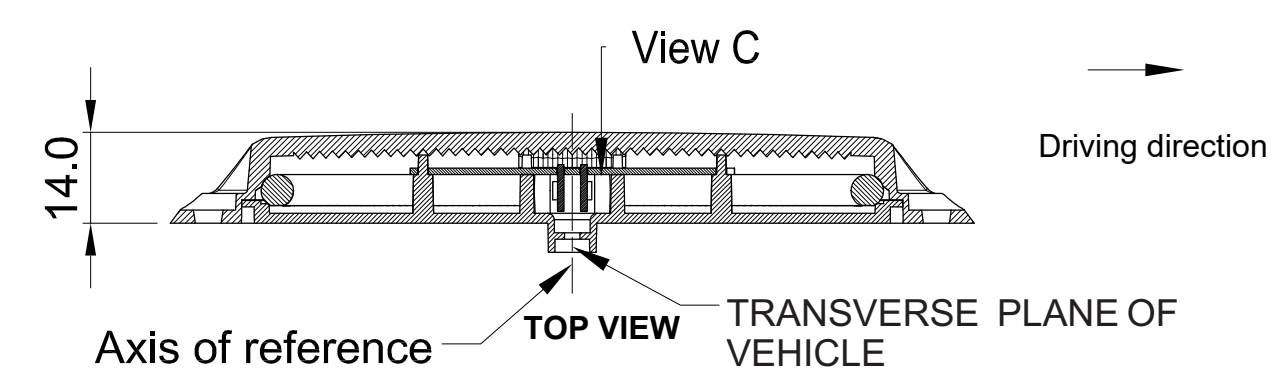
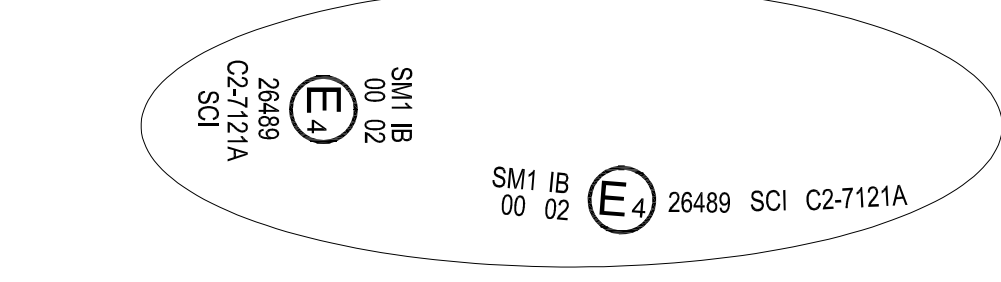
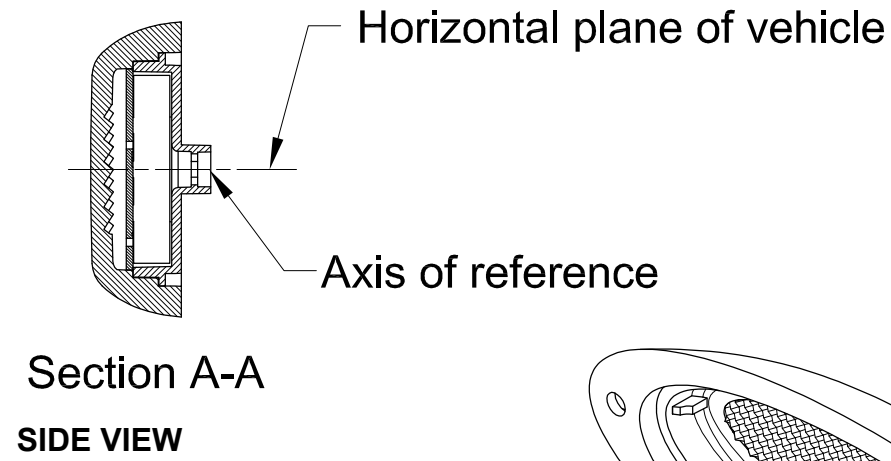
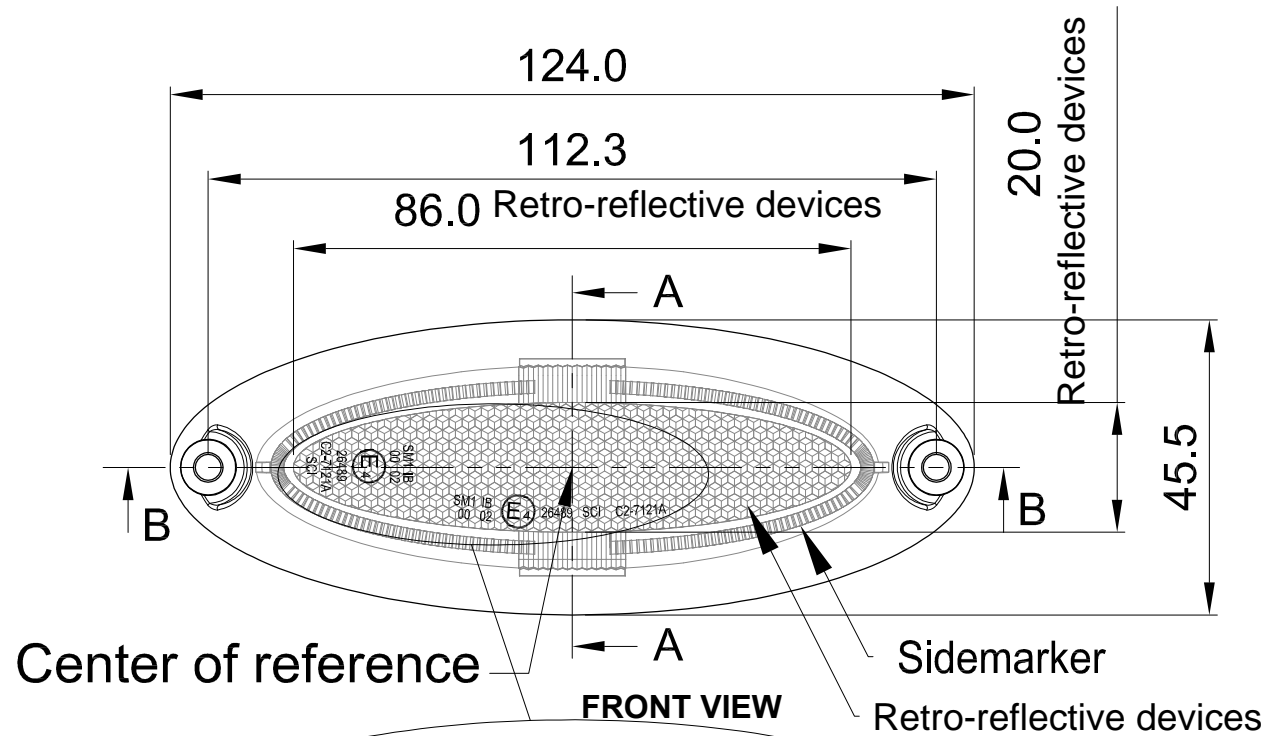
NOTE:
1. This drawing is Vertical mounting type.



A3

Date	Name	Description	No.	Drawn	Checked	Approved	SCI BOM No.	Model Name	LED sidemarker lamps
				Mike			Customer No.	Model No.	C2-7121A
				06/20/18'			Unit	mm	Shin Chin Industrial Co., Ltd.
									Rev. X0

Horizontal mounting type



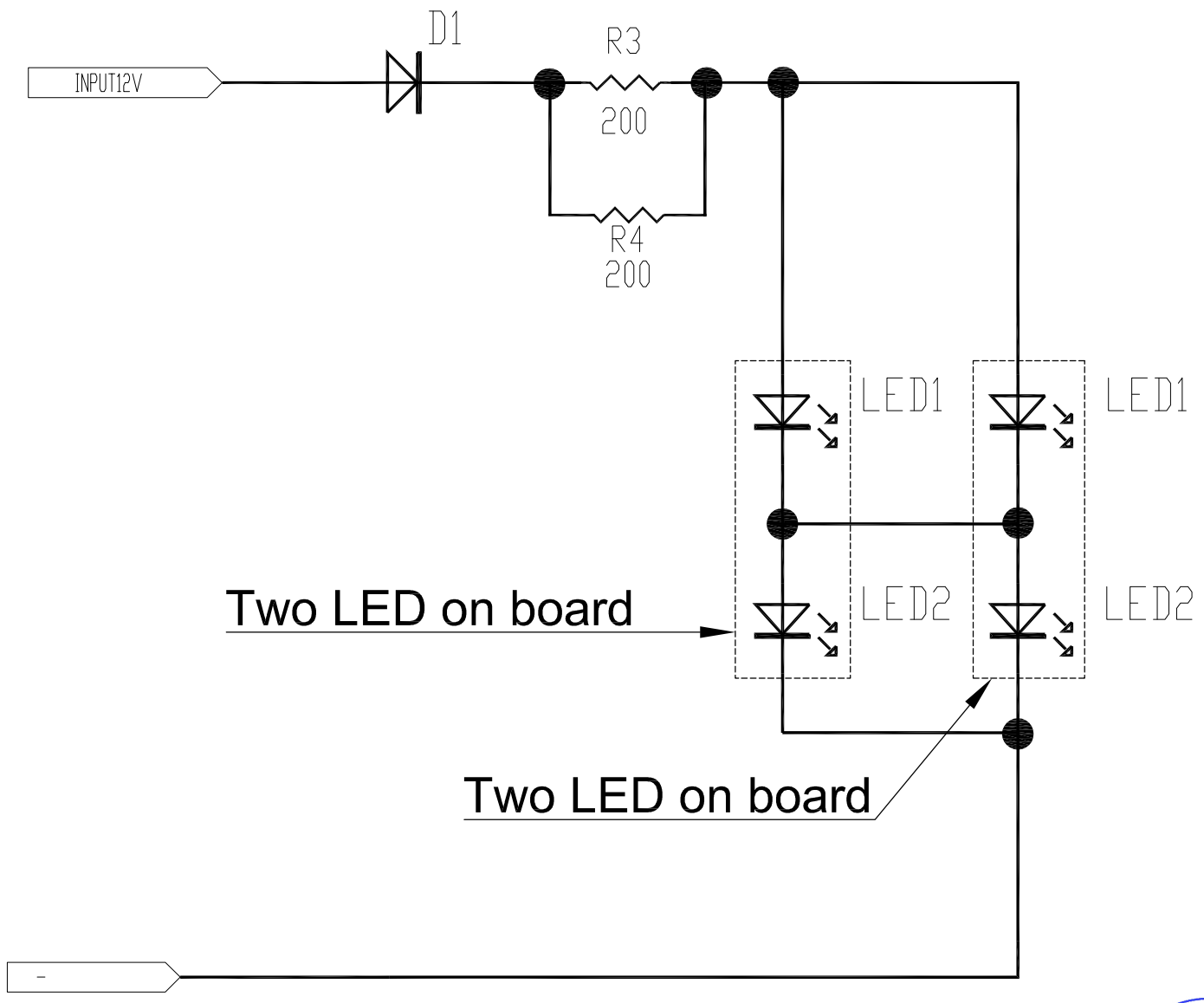
NOTE:
1. This drawing is Horizontal mounting type.



A3

Date	Name	Description	No.	Drawn	Checked	Approved	SCI BOM No.	Model Name	LED sidemarker lamps
				Mike			Customer No.	Model No.	C2-7121A
				06/20/18'			Unit	mm	Shin Chin Industrial Co., Ltd.

日期	更正者	校	正	記	事	符號
						⚠

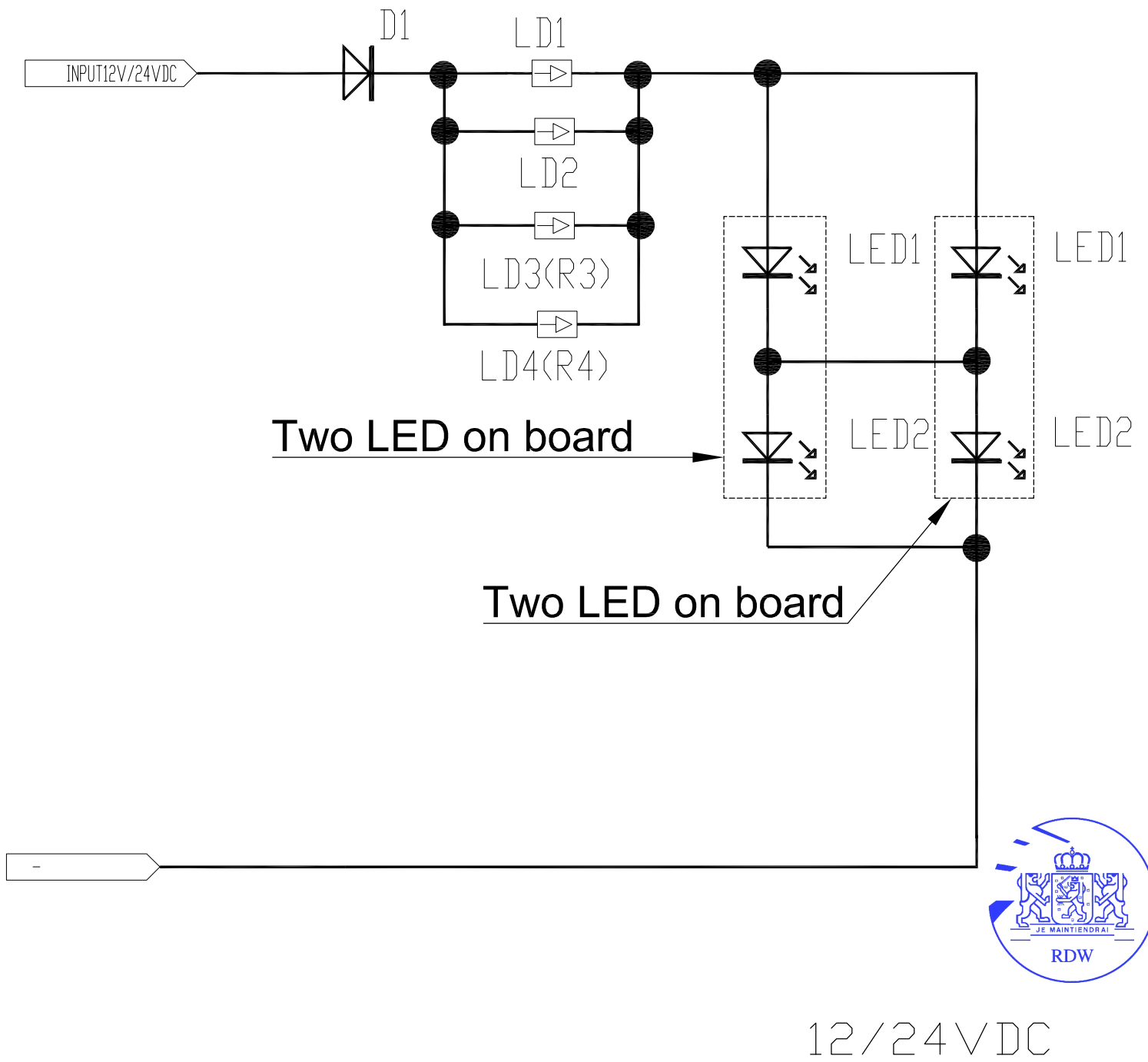


12VDC



編號	零件名稱	數量	材	質	規	格	加工處理	備	註
設計	林汶珈	4/25/18	◎ 同心度	⊥ 垂直度	∠ 傾斜度	一般加工公差 (mm)	品名	PCB線路圖	
製圖	林汶珈	6/19/18	∥ 平行度	▭ 真平度	∕ 偏轉度	4以下 63-250	品號	C2-7121	
校對			○ 真圓度	— 真直度	⊘ 圓柱度	4-16 250以上	圖號	C2-7121-4C8A-00	
核準			第三角法	單位 mm	比例 2/1	16-63 角度公差			
舊檔號碼							檔案號碼		
請勿實測圖面							圖面版本	X0	

日期	更正者	校	正	記	事	符號
						△



編號	零件名稱	數量	材	質	規	格	加工處理	備	註
設計	林汶珈	4/25'18	◎	同心度	⊥	垂直度	∠	傾斜度	一般加工公差 (mm)
製圖	林汶珈	6/19/'18	∥	平行度	□	真平度	/	偏轉度	4以下 63-250
校對			○	真圓度	-	真直度	⊙	圓柱度	4-16 250以上
核準			第三角法	單位	mm	比例	2/1	16-63	角度公差
舊檔號碼	新進工業股份有限公司						檔案號碼		
請勿實測圖面							圖面版本	X0	