ECE TYPE-APPROVAL CERTIFICATE

E24

Communication concerning: Approval granted
~~Approval extended~~
~~Approval refused~~
~~Approval withdrawn~~
~~Production definitively discontinued~~

of a type of ~~front position lamps,~~ rear position lamps, stop lamps, ~~direction indicators~~ and rear-registration-plate illuminating devices for mopeds, motor cycles and vehicles treated as such pursuant to Regulation No. 50.

Approval No: ***E24*50R01/00*0471*00***

1.	Trade name or mark of the device:	***CD***
2.	Manufacturer's name for the type of device:	***DOT-TAIL-SMK-LP-WIN***
3.	Manufacturer's name and address:	***Shanghai Jason Plastic Co., Ltd.*** ***B3, No. 108, Pengfeng Road, Malu Town,*** ***Jiading District, Shanghai, China***
4.	If applicable, name and address of manufacturer's representative:	***N/A***
5.	Submitted for approval on:	***29.05.2020***
6.	Technical service responsible for conducting approval tests:	***TÜV SÜD Auto Service GmbH*** ***Westendstraße 199*** ***D-80686 München***
7.	Date of test report issued by that service:	***27.05.2020***
8.	Number of report issued by that service:	***20-00764-CX-SHA-00***

NSAI, 1 Swift Square, Northwood, Santry, Dublin 9, Ireland. Telephone: (+353+1) 807 3800, Facsimile: 01-807 3844

Approval No: ***E24*50R01/00*0471*00***

9. Concise description[1]:

By category of lamp:	***Rear position lamp and stop lamp and license plate lamp***
Colour of light emitted (red/ white~~/amber~~):	***Rear position lamp: Red;*** ***Stop lamp: Red;*** ***License plate lamp: Colorless***
Number and category(ies) of light source(s):	***25*LEDs for stop lamp and 10*LEDs for rear position lamp,*** ***5*LEDs for license plate lamp***
Light source module: ~~yes~~/~~no~~[2]	***N/A***
Light source module specific identification code:	***N/A***
Geometrical conditions of installation and relating variations, if any:	***See manufacturer's information document***
Application of an electronic light source control gear/variable intensity control:	
(a) Being part of the lamp: ~~yes/~~no/~~not applicable:~~	***No***
(b) Being not part of the lamp: ~~yes/~~no/~~not applicable~~:	***No***
Input voltage(s) supplied by an electronic light source control gear/variable intensity control:	***N/A***
Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body):	***N/A***
Only for limited mounting height of equal to or less than 750mm above the ground: ~~yes~~/no[2]	***No***
Function(s) produced by an interdependent lamp forming part of an interdependent lamp system:	
Front position lamp: ~~yes/~~no[2]	***No***
Rear position lamp: ~~yes/~~no[2]	***No***
Stop lamp: ~~yes~~/no[2]	***No***
Sequential activation of light sources (see paragraph 6.8. of this Regulation): ~~yes~~/no[2]	***No***

[1] For the purpose of this Regulation "being part of the lamp" means to be physically included in the lamp body or to be external, separated or not, but supplied by the lamp manufacturer as part of the lamp system. The functioning and installation conditions of these additional systems will be defined by special provisions."

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Approval No: ***E24*50R01/00*0471*00***

10.	Position of the approval mark:	***On the lens***
11.	Reason(s) for extension (if applicable):	***N/A***
12.	Approval granted/~~extended/refused/withdrawn~~:	***Granted***
13.	Place:	***Dublin***
14.	Date:	***11th June, 2020***
15.	Signature:	

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

NSAI, 1 Swift Square, Northwood, Santry, Dublin 9, Ireland. Telephone: (+353+1) 807 3800, Facsimile: 01-807 3844

Approval No: ***E24*50R01/00*0471*00***

Index to the Information Package

Date of issue:	***11th June, 2020***
Date of latest amendment:	***N/A***
Reason for extension/revision:	***N/A***

1. Additional conditions, and advisory notes on legal alternatives.

2. Test report(s)

- numbers(s):	***20-00764-CX-SHA-00***
- date of issue:	***27.05.2020***
- date of latest amendment:	***N/A***

3. Information document

- number(s):	***DOT-TAIL-SMK-LP-WIN-00***
- date of issue:	***08.05.2020***
- date of latest amendment:	***N/A***
Documentation:	***34 pages***

NSAI, 1 Swift Square, Northwood, Santry, Dublin 9, Ireland. Telephone: (+353+1) 807 3800, Facsimile: 01-807 3844

Approval No: ***E24*50R01/00*0471*00***

Appendix: **Additional conditions, and advisory notes on legal alternatives.**

A: Additional conditions:

1. The device, type *DOT-TAIL-SMK-LP-WIN*, shall be marked as prescribed in the regulation.
2. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
3. Each individual product from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
4. Changes in the product are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
5. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type of product no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
6. NSAI may at any time check the correct performance of the duties imposed by the grant of this Type Approval, and in order to do so, may make tests, or have tests made.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to the NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the vehicle, system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year.The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B : Legal Options

Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin.

NSAI, 1 Swift Square, Northwood, Santry, Dublin 9, Ireland. Telephone: (+353+1) 807 3800, Facsimile: 01-807 3844

Test Report

No.: 20-00764-CX-SHA-00

Test of a type of component
with regard to

UN/ECE Regulation No. 50

including all amendments up to
supplement 00 to the 01 series of amendments

Approval subject:
Rear position lamp, stop lamp and license plate lamp

Approval status		
☒	Granting of a type approval	
☐	Extension/correction to type approval no.	N/A

I. General

Make (trade name of manufacturer)	:	CD
Type	:	DOT-TAIL-SMK-LP-WIN
Variants	:	Variant 1: DOT-TAIL-SMK-LP-WIN Variant 2: DOT-TAIL-RED-LP-WIN
Means of identification of type	:	By letters
Concise description		
By category of lamp	:	Rear position lamp and stop lamp and license plate lamp
Number and category(ies) of light source(s)	:	25*LEDs for stop lamp and 10*LEDs for rear position lamp, 5*LEDs for license plate lamp
Colour of light emitted	:	Rear position lamp: Red; Stop lamp: Red; License plate lamp: Colorless
Light source module	:	N/A
Light source module specific identification code	:	N/A
Geometrical conditions of installation and relating variations, if any	:	See manufacturer's information document
Application of an electronic light source control gear/variable intensity control		
Being part of the lamp	:	No
Being not part of the lamp	:	No
Input voltage(s) supplied by an electronic light source control gear/ variable intensity control	:	N/A
Electronic light source control gear/ variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body)	:	N/A

Only for limited mounting height of equal to or less than 750 mm above the ground	:	No

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

Front position lamp	:	No
Rear position lamp	:	No
Stop lamp	:	No
Sequential activation of light sources (see paragraph 6.8. of this Regulation)	:	No
Name and address of manufacturer	:	Shanghai Jason Plastic Co., Ltd. B3, No. 108, Pengfeng Road, Malu Town, Jiading District, Shanghai, China
Address of assembly plant	:	Same as above
Location of the approval mark	:	On lens
If applicable, name and address of the manufacturer's representative	:	N/A

II. Test results

Refer to the Annex II

III. Enclosures

Information folder No. DOT-TAIL-SMK-LP-WIN-00 dated 2020-05-08 (YYYY-MM-DD)

IV. Statement of conformity

The mentioned information folder and the type described therein are in accordance with the test basis mentioned above. The worst-case was selected in accordance with document "Requirements for Test Reports (AS-PB-T-02)".

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.

TÜV SÜD Auto Service GmbH is designated as Technical Service by:

Approval authority	**Country**	**Registration-number**
Kraftfahrt-Bundesamt (KBA)	Germany	KBA-P 00100-10
Vehicle Certification Agency (VCA)	United Kingdom	VCA-TS-006
Approval Authority of the Netherlands (RDW)	The Netherlands	RDWT-082-xx
National Standards Authority of Ireland (NSAI)	Ireland	Technical Service Number: 49
Société Nationale de Certification et d'Homologation s.à r.l. (SNCH)	Luxembourg	13/B(g)

München, 2020-05-27
(yyyy-mm-dd)

Technischer Dienst Technical Service TÜV SÜD Auto Service GmbH 092

Henry Chen

E24*50R01/00*0471*00

Annex I Reason of Extension

Correction of : N/A

Modification of : N/A

Addition of : N/A

Deletion of : N/A

Annex II Test results

1. Test conditions

1.1.	Technical data of the test samples	:	Four samples were tested. Sample No. 1 and sample No. 2 are for variant 1. Sample No. 3 and sample No. 4 are for variant 2. 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.: 50.01.
1.3.	Measuring and test equipment	:	Full automatic photometric test system for automobile lamps EVERFINE PHOTO-E-INFO CO., LTD. Type GO-HD5

2. Test results

2.1. General Specifications

The devices have been 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.

2.2. Intensity of light emitted

Variant 1: Smoky grey outer lens

2.2.1. Rear position lamp

2.2.1.1. Sample No. 1, normal mode, 10*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	0.80	17.00	5.07	5.35	Complies
2	5R	10U	0.80	17.00	5.27	5.56	Complies
3	20R	5U	0.40	17.00	8.15	8.60	Complies
4	10R	5U	0.80	17.00	5.68	6.00	Complies
5	H	5U	2.80	17.00	5.27	5.56	Complies
6	10L	5U	0.80	17.00	5.57	5.88	Complies
7	20L	5U	0.40	17.00	7.05	7.44	Complies
8	10L	V	1.40	17.00	5.19	5.48	Complies
9	5L	V	3.60	17.00	4.99	5.27	Complies
10	H	V	4.00	17.00	5.02	5.30	Complies
11	5R	V	3.60	17.00	4.91	5.18	Complies
12	10R	V	1.40	17.00	5.34	5.64	Complies
13	20R	5D	0.40	17.00	8.29	8.75	Complies
14	10R	5D	0.80	17.00	5.61	5.92	Complies
15	H	5D	2.80	17.00	5.01	5.29	Complies
16	10L	5D	0.80	17.00	5.44	5.74	Complies
17	20L	5D	0.40	17.00	7.27	7.68	Complies
18	5L	10D	0.80	17.00	5.27	5.56	Complies
19	5R	10D	0.80	17.00	5.32	5.62	Complies
20	All directions Min.		0.05	---	0.38	0.40	Complies
21	All directions Max.		---	17.00	8.55	9.03	Complies

2.2.1.2. Sample No. 2, normal mode, 10*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	0.80	17.00	4.50	4.77	Complies
2	5R	10U	0.80	17.00	4.70	4.98	Complies
3	20R	5U	0.40	17.00	8.14	8.62	Complies
4	10R	5U	0.80	17.00	5.42	5.74	Complies
5	H	5U	2.80	17.00	4.71	4.99	Complies
6	10L	5U	0.80	17.00	5.06	5.36	Complies
7	20L	5U	0.40	17.00	6.75	7.15	Complies
8	10L	V	1.40	17.00	5.52	5.85	Complies
9	5L	V	3.60	17.00	5.02	5.32	Complies
10	H	V	4.00	17.00	5.08	5.38	Complies
11	5R	V	3.60	17.00	5.23	5.54	Complies
12	10R	V	1.40	17.00	5.78	6.12	Complies
13	20R	5D	0.40	17.00	6.97	7.38	Complies
14	10R	5D	0.80	17.00	5.56	5.89	Complies
15	H	5D	2.80	17.00	4.84	5.13	Complies
16	10L	5D	0.80	17.00	5.30	5.61	Complies
17	20L	5D	0.40	17.00	6.67	7.06	Complies
18	5L	10D	0.80	17.00	4.12	4.36	Complies
19	5R	10D	0.80	17.00	4.09	4.33	Complies
20	All directions Min.		0.05	---	0.35	0.37	Complies
21	All directions Max.		---	17.00	8.60	9.11	Complies

2.2.2. Stop lamp

2.2.2.1. Sample No. 1, normal mode, 25*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	65.92	67.55	Complies
2	5R	10U	8.00	260.00	61.36	62.88	Complies
3	20R	5U	4.00	260.00	83.23	85.29	Complies
4	10R	5U	8.00	260.00	113.34	116.14	Complies
5	H	5U	28.00	260.00	130.38	133.60	Complies
6	10L	5U	8.00	260.00	128.28	131.45	Complies
7	20L	5U	4.00	260.00	92.28	94.56	Complies
8	10L	V	14.00	260.00	134.62	137.95	Complies
9	5L	V	36.00	260.00	165.99	170.09	Complies
10	H	V	40.00	260.00	199.82	204.76	Complies
11	5R	V	36.00	260.00	151.41	155.15	Complies
12	10R	V	14.00	260.00	146.11	149.72	Complies
13	20R	5D	4.00	260.00	66.23	67.87	Complies
14	10R	5D	8.00	260.00	126.09	129.21	Complies
15	H	5D	28.00	260.00	159.77	163.72	Complies
16	10L	5D	8.00	260.00	127.98	131.14	Complies
17	20L	5D	4.00	260.00	85.96	88.09	Complies
18	5L	10D	8.00	260.00	69.30	71.01	Complies
19	5R	10D	8.00	260.00	59.28	60.75	Complies
20	All Directions Min.		0.30	---	5.16	5.29	Complies
21	All Directions Max.		---	260.00	205.26	210.33	Complies

2.2.2.2. Sample No. 2, normal mode, 25*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	68.31	70.12	Complies
2	5R	10U	8.00	260.00	56.05	57.54	Complies
3	20R	5U	4.00	260.00	76.56	78.59	Complies
4	10R	5U	8.00	260.00	116.99	120.09	Complies
5	H	5U	28.00	260.00	134.27	137.83	Complies
6	10L	5U	8.00	260.00	126.37	129.72	Complies
7	20L	5U	4.00	260.00	85.94	88.22	Complies
8	10L	V	14.00	260.00	148.05	151.97	Complies
9	5L	V	36.00	260.00	170.18	174.69	Complies
10	H	V	40.00	260.00	201.05	206.38	Complies
11	5R	V	36.00	260.00	167.48	171.92	Complies
12	10R	V	14.00	260.00	135.04	138.62	Complies
13	20R	5D	4.00	260.00	74.03	75.99	Complies
14	10R	5D	8.00	260.00	138.97	142.65	Complies
15	H	5D	28.00	260.00	171.89	176.45	Complies
16	10L	5D	8.00	260.00	135.43	139.02	Complies
17	20L	5D	4.00	260.00	83.98	86.21	Complies
18	5L	10D	8.00	260.00	74.36	76.33	Complies
19	5R	10D	8.00	260.00	68.58	70.40	Complies
20	All Directions Min.		0.30	---	5.37	5.51	Complies
21	All Directions Max.		---	260.00	204.77	210.20	Complies

2.2.2.3. Sample No. 1, failed mode, 12*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	39.82	40.90	Complies
2	5R	10U	8.00	260.00	35.07	36.02	Complies
3	20R	5U	4.00	260.00	45.21	46.44	Complies
4	10R	5U	8.00	260.00	65.35	67.12	Complies
5	H	5U	28.00	260.00	72.43	74.39	Complies
6	10L	5U	8.00	260.00	68.63	70.49	Complies
7	20L	5U	4.00	260.00	50.83	52.21	Complies
8	10L	V	14.00	260.00	74.75	76.78	Complies
9	5L	V	36.00	260.00	87.89	90.27	Complies
10	H	V	40.00	260.00	102.86	105.65	Complies
11	5R	V	36.00	260.00	82.61	84.85	Complies
12	10R	V	14.00	260.00	77.67	79.78	Complies
13	20R	5D	4.00	260.00	36.49	37.48	Complies
14	10R	5D	8.00	260.00	70.51	72.42	Complies
15	H	5D	28.00	260.00	88.07	90.46	Complies
16	10L	5D	8.00	260.00	70.13	72.03	Complies
17	20L	5D	4.00	260.00	47.41	48.70	Complies
18	5L	10D	8.00	260.00	41.36	42.48	Complies
19	5R	10D	8.00	260.00	34.74	35.68	Complies
20	All Directions Min.		0.30	---	2.74	2.81	Complies
21	All Directions Max.		---	260.00	104.37	107.20	Complies

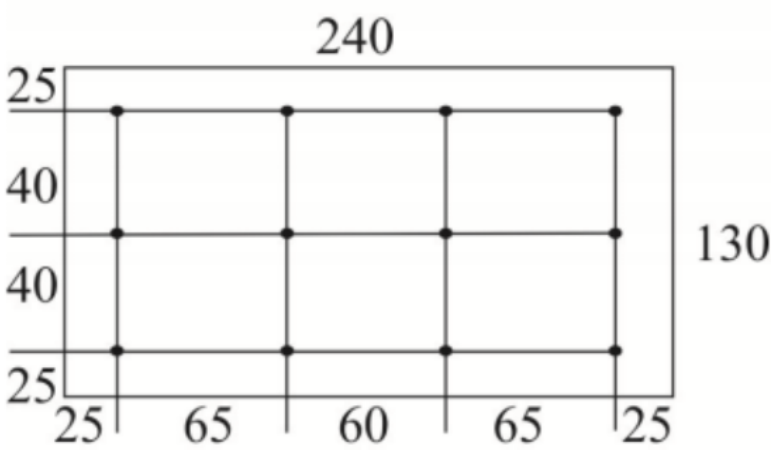
2.2.2.4. Sample No. 2, failed mode, 12*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	42.69	44.01	Complies
2	5R	10U	8.00	260.00	33.59	34.63	Complies
3	20R	5U	4.00	260.00	44.98	46.37	Complies
4	10R	5U	8.00	260.00	65.31	67.33	Complies
5	H	5U	28.00	260.00	79.93	82.40	Complies
6	10L	5U	8.00	260.00	72.94	75.20	Complies
7	20L	5U	4.00	260.00	50.43	51.99	Complies
8	10L	V	14.00	260.00	80.28	82.76	Complies
9	5L	V	36.00	260.00	93.49	96.38	Complies
10	H	V	40.00	260.00	107.27	110.59	Complies
11	5R	V	36.00	260.00	87.53	90.24	Complies
12	10R	V	14.00	260.00	75.24	77.57	Complies
13	20R	5D	4.00	260.00	42.65	43.97	Complies
14	10R	5D	8.00	260.00	78.37	80.80	Complies
15	H	5D	28.00	260.00	95.13	98.07	Complies
16	10L	5D	8.00	260.00	74.31	76.61	Complies
17	20L	5D	4.00	260.00	44.8	46.19	Complies
18	5L	10D	8.00	260.00	39.17	40.38	Complies
19	5R	10D	8.00	260.00	38.38	39.57	Complies
20	All Directions Min.		0.30	---	2.96	3.05	Complies
21	All Directions Max.		---	260.00	111.62	115.07	Complies

2.2.3. The ratio between the luminous intensities actually measured of the two lamps when turned on simultaneously at the intensity of the rear position lamp when turned on alone

No.	Point of the measurement		Limits		Measured values		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
4	10R	5U	5.00	---	20.70	22.34	Complies
5	V	5U	5.00	---	25.53	29.21	Complies
6	10L	5U	5.00	---	23.74	25.70	Complies
8	10L	H	5.00	---	26.59	27.61	Complies
9	5L	H	5.00	---	33.94	34.68	Complies
10	V	H	5.00	---	40.48	40.28	Complies
11	5R	H	5.00	---	31.61	32.67	Complies
12	10R	H	5.00	---	28.06	24.13	Complies
14	10R	5D	5.00	---	23.23	25.74	Complies
15	V	5D	5.00	---	32.65	36.25	Complies
16	10L	5D	5.00	---	24.30	26.33	Complies

2.2.4. Rear registration plate lamp, category 1 (240 mm x 130 mm)



2.2.4.1. Sample No. 1 and sample No. 2, test voltage 13.5V, 1 minute (LUMINANCE ≥ 2cd/m^2).

Luminance Measurements (B) Sample No. 1	1	2	3	4
	3.60	4.00	4.00	3.70
	5	6	7	8
	5.00	6.80	7.20	5.40
	9	10	11	12
	6.60	16.70	17.30	7.00
Luminance Measurements (B) Sample No. 2	1	2	3	4
	3.70	4.10	4.20	3.80
	5	6	7	8
	5.30	7.10	7.40	5.50
	9	10	11	12
	6.90	17.30	17.50	7.30

2.2.4.2. Sample No. 1 and sample No. 2, test voltage 13.5V, 30 minutes (LUMINANCE ≥ 2cd/m^2).

Luminance Measurements (B) Sample No. 1	1	2	3	4
	3.40	3.80	3.80	3.50
	5	6	7	8
	4.70	6.40	6.80	5.10
	9	10	11	12
	6.20	25.80	16.30	6.60
Luminance Measurements (B) Sample No. 2	1	2	3	4
	3.50	3.90	4.00	3.60
	5	6	7	8
	5.00	6.70	7.00	5.20
	9	10	11	12
	6.50	16.40	16.60	6.90

2.2.4.3. The gradient of the luminance between the values B1 and B2

	Sample No. 1	Sample No. 2
Requirement	Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2\ (cm)} \leq 2 \times Bo / cm$	
Results	Max. of gradient of luminance= 2.38 2 x Bo / cm= 6.80 Complies	Max. of gradient of luminance= 2.43 2 x Bo / cm= 7.00 Complies
Conclusion	Complies	Complies

2.2.4.4. Incidence of the light

	Sample No. 1	Sample No. 2
Requirement	According to this regulation paragraph 7.	
Results	The angle of incidence of the light on the surface of the plate does not exceed 82° at any point on the surface	
Conclusion	Complies	Complies

2.2.4.5. Colour of the light

	Sample No. 1	Sample No. 2
Requirement	According to this regulation paragraph 6.	
Results	The light of the lamp used in the illuminating device is sufficiently colourless not to cause any appreciable change in the colour of the registration plate.	
Conclusion	Complies	Complies

2.3. Colour

2.3.1. Rear position lamp - Red

Sample	Measured values		Limits		Conclusion
	x	y	y ≤ 0.335	y ≥ 0.980 - x	
No. 1	0.6945	0.3024	Yes	Yes	Complies
No. 2	0.6962	0.3010	Yes	Yes	Complies

2.3.2. Stop lamp - Red

Sample	Measured values		Limits		Conclusion
	x	y	y ≤ 0.335	y ≥ 0.980 - x	
No. 1	0.6986	0.3006	Yes	Yes	Complies
No. 2	0.6970	0.2996	Yes	Yes	Complies

2.4. Intensity of light emitted

Variant 2: Red outer lens

2.4.1. Rear position lamp

2.4.1.1. Sample No. 1, normal mode, 10*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	0.80	17.00	6.10	6.52	Complies
2	5R	10U	0.80	17.00	6.17	6.60	Complies
3	20R	5U	0.40	17.00	8.88	9.50	Complies
4	10R	5U	0.80	17.00	6.62	7.08	Complies
5	H	5U	2.80	17.00	5.74	6.14	Complies
6	10L	5U	0.80	17.00	6.66	7.12	Complies
7	20L	5U	0.40	17.00	9.32	9.97	Complies
8	10L	V	1.40	17.00	5.95	6.36	Complies
9	5L	V	3.60	17.00	5.39	5.76	Complies
10	H	V	4.00	17.00	5.33	5.70	Complies
11	5R	V	3.60	17.00	5.51	5.89	Complies
12	10R	V	1.40	17.00	6.06	6.48	Complies
13	20R	5D	0.40	17.00	8.24	8.81	Complies
14	10R	5D	0.80	17.00	5.85	6.26	Complies
15	H	5D	2.80	17.00	5.51	5.89	Complies
16	10L	5D	0.80	17.00	5.83	6.23	Complies
17	20L	5D	0.40	17.00	8.75	9.36	Complies
18	5L	10D	0.80	17.00	5.54	5.92	Complies
19	5R	10D	0.80	17.00	5.47	5.85	Complies
20	All directions Min.		0.05	---	0.42	0.45	Complies
21	All directions Max.		---	17.00	9.76	10.44	Complies

2.4.1.2. Sample No. 2, normal mode, 10*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	0.80	17.00	6.24	6.60	Complies
2	5R	10U	0.80	17.00	6.45	6.82	Complies
3	20R	5U	0.40	17.00	9.28	9.81	Complies
4	10R	5U	0.80	17.00	7.21	7.62	Complies
5	H	5U	2.80	17.00	6.31	6.67	Complies
6	10L	5U	0.80	17.00	7.08	7.48	Complies
7	20L	5U	0.40	17.00	9.64	10.19	Complies
8	10L	V	1.40	17.00	6.48	6.85	Complies
9	5L	V	3.60	17.00	5.74	6.07	Complies
10	H	V	4.00	17.00	5.78	6.11	Complies
11	5R	V	3.60	17.00	5.97	6.31	Complies
12	10R	V	1.40	17.00	6.53	6.90	Complies
13	20R	5D	0.40	17.00	8.98	9.49	Complies
14	10R	5D	0.80	17.00	6.22	6.58	Complies
15	H	5D	2.80	17.00	5.95	6.29	Complies
16	10L	5D	0.80	17.00	6.17	6.52	Complies
17	20L	5D	0.40	17.00	9.13	9.65	Complies
18	5L	10D	0.80	17.00	5.64	5.96	Complies
19	5R	10D	0.80	17.00	5.67	5.99	Complies
20	All directions Min.		0.05	---	0.40	0.42	Complies
21	All directions Max.		---	17.00	9.55	10.10	Complies

2.4.2. Stop lamp

2.4.2.1. Sample No. 1, normal mode, 25*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	79.76	81.89	Complies
2	5R	10U	8.00	260.00	77.75	79.83	Complies
3	20R	5U	4.00	260.00	82.22	84.42	Complies
4	10R	5U	8.00	260.00	146.04	149.95	Complies
5	H	5U	28.00	260.00	173.89	178.54	Complies
6	10L	5U	8.00	260.00	158.8	163.05	Complies
7	20L	5U	4.00	260.00	86.71	89.03	Complies
8	10L	V	14.00	260.00	188.79	193.84	Complies
9	5L	V	36.00	260.00	210.47	216.10	Complies
10	H	V	40.00	260.00	228.4	234.51	Complies
11	5R	V	36.00	260.00	207.38	212.93	Complies
12	10R	V	14.00	260.00	180.00	184.82	Complies
13	20R	5D	4.00	260.00	83.84	86.08	Complies
14	10R	5D	8.00	260.00	138.36	142.06	Complies
15	H	5D	28.00	260.00	182.26	187.14	Complies
16	10L	5D	8.00	260.00	154.28	158.41	Complies
17	20L	5D	4.00	260.00	102.57	105.31	Complies
18	5L	10D	8.00	260.00	82.80	85.02	Complies
19	5R	10D	8.00	260.00	89.73	92.13	Complies
20	All Directions Min.		0.30	---	5.96	6.12	Complies
21	All Directions Max.		---	260.00	232.11	238.32	Complies

2.4.2.2. Sample No. 2, normal mode, 25*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	79.97	82.23	Complies
2	5R	10U	8.00	260.00	83.11	85.46	Complies
3	20R	5U	4.00	260.00	62.16	63.92	Complies
4	10R	5U	8.00	260.00	124.95	128.49	Complies
5	H	5U	28.00	260.00	176.02	181.00	Complies
6	10L	5U	8.00	260.00	136.75	140.62	Complies
7	20L	5U	4.00	260.00	74.71	76.82	Complies
8	10L	V	14.00	260.00	170.84	175.68	Complies
9	5L	V	36.00	260.00	198.30	203.91	Complies
10	H	V	40.00	260.00	205.26	211.07	Complies
11	5R	V	36.00	260.00	183.69	188.89	Complies
12	10R	V	14.00	260.00	156.76	161.20	Complies
13	20R	5D	4.00	260.00	76.40	78.56	Complies
14	10R	5D	8.00	260.00	130.04	133.72	Complies
15	H	5D	28.00	260.00	177.12	182.13	Complies
16	10L	5D	8.00	260.00	136.8	140.67	Complies
17	20L	5D	4.00	260.00	111.21	114.36	Complies
18	5L	10D	8.00	260.00	88.58	91.09	Complies
19	5R	10D	8.00	260.00	79.34	81.59	Complies
20	All Directions Min.		0.30	---	6.22	6.40	Complies
21	All Directions Max.		---	260.00	209.37	215.30	Complies

2.4.2.3. Sample No. 1, failed mode, 12*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	43.19	44.61	Complies
2	5R	10U	8.00	260.00	42.90	44.31	Complies
3	20R	5U	4.00	260.00	47.15	48.70	Complies
4	10R	5U	8.00	260.00	80.46	83.11	Complies
5	H	5U	28.00	260.00	90.94	93.94	Complies
6	10L	5U	8.00	260.00	86.22	89.06	Complies
7	20L	5U	4.00	260.00	51.32	53.01	Complies
8	10L	V	14.00	260.00	96.45	99.63	Complies
9	5L	V	36.00	260.00	108.21	111.78	Complies
10	H	V	40.00	260.00	120.40	124.37	Complies
11	5R	V	36.00	260.00	107.30	110.84	Complies
12	10R	V	14.00	260.00	97.78	101.00	Complies
13	20R	5D	4.00	260.00	46.75	48.29	Complies
14	10R	5D	8.00	260.00	79.95	82.59	Complies
15	H	5D	28.00	260.00	99.39	102.67	Complies
16	10L	5D	8.00	260.00	85.72	88.55	Complies
17	20L	5D	4.00	260.00	60.72	62.72	Complies
18	5L	10D	8.00	260.00	48.11	49.70	Complies
19	5R	10D	8.00	260.00	50.92	52.60	Complies
20	All Directions Min.		0.30	---	3.16	3.26	Complies
21	All Directions Max.		---	260.00	123.27	127.33	Complies

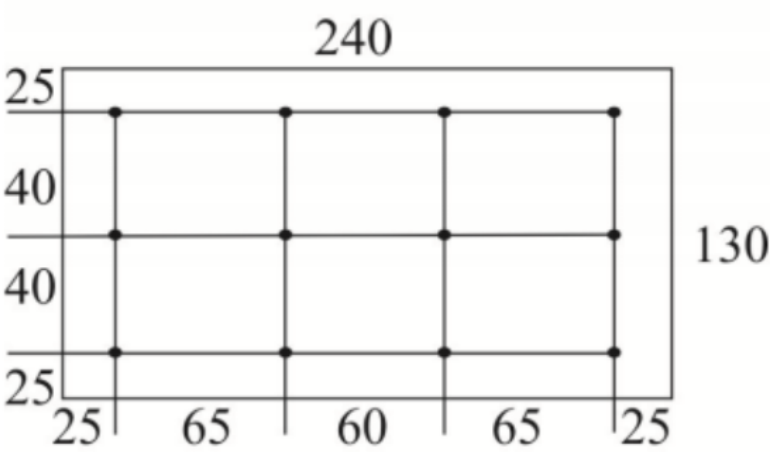
2.4.2.4. Sample No. 2, failed mode, 12*LEDs lit together, test voltage 13.5V.

No.	Point of the measurement		Limits [cd]		Measured values [cd]		Conclusion
			Min.	Max.	30 minutes	1 minute	
1	5L	10U	8.00	260.00	43.21	44.87	Complies
2	5R	10U	8.00	260.00	46.56	48.35	Complies
3	20R	5U	4.00	260.00	34.93	36.27	Complies
4	10R	5U	8.00	260.00	66.70	69.26	Complies
5	H	5U	28.00	260.00	93.77	97.37	Complies
6	10L	5U	8.00	260.00	72.64	75.43	Complies
7	20L	5U	4.00	260.00	43.05	44.70	Complies
8	10L	V	14.00	260.00	91.28	94.79	Complies
9	5L	V	36.00	260.00	104.61	108.63	Complies
10	H	V	40.00	260.00	110.16	114.39	Complies
11	5R	V	36.00	260.00	99.52	103.34	Complies
12	10R	V	14.00	260.00	81.82	84.96	Complies
13	20R	5D	4.00	260.00	45.30	47.04	Complies
14	10R	5D	8.00	260.00	72.52	75.30	Complies
15	H	5D	28.00	260.00	90.26	93.73	Complies
16	10L	5D	8.00	260.00	74.86	77.73	Complies
17	20L	5D	4.00	260.00	59.17	61.44	Complies
18	5L	10D	8.00	260.00	50.43	52.37	Complies
19	5R	10D	8.00	260.00	44.57	46.28	Complies
20	All Directions Min.		0.30	---	3.52	3.66	Complies
21	All Directions Max.		---	260.00	113.77	118.14	Complies

2.4.3. The ratio between the luminous intensities actually measured of the two lamps when turned on simultaneously at the intensity of the rear position lamp when turned on alone

No.	Point of the measurement		Limits		Measured values		Conclusion
			Min.	Max.	Sample No. 1	Sample No. 2	
4	10R	5U	5.00	---	22.90	18.12	Complies
5	V	5U	5.00	---	31.11	28.74	Complies
6	10L	5U	5.00	---	24.61	20.17	Complies
8	10L	H	5.00	---	32.45	27.11	Complies
9	5L	H	5.00	---	39.84	35.22	Complies
10	V	H	5.00	---	43.61	36.26	Complies
11	5R	H	5.00	---	38.44	31.52	Complies
12	10R	H	5.00	---	30.49	24.72	Complies
14	10R	5D	5.00	---	24.48	21.70	Complies
15	V	5D	5.00	---	33.89	30.46	Complies
16	10L	5D	5.00	---	27.28	22.91	Complies

2.4.4. Rear registration plate lamp, category 1 (240 mm x 130 mm)



2.4.4.1. Sample No. 1 and sample No. 2, test voltage 13.5V, 1 minute (LUMINANCE ≥ 2cd/m^2).

Luminance Measurements (B) Sample No. 1	1	2	3	4
	3.20	3.60	3.70	3.40
	5	6	7	8
	4.50	5.70	6.30	4.80
	9	10	11	12
	5.80	15.00	15.60	6.30
Luminance Measurements (B) Sample No. 2	1	2	3	4
	3.30	3.70	4.00	3.30
	5	6	7	8
	4.80	6.00	6.20	4.90
	9	10	11	12
	6.10	15.60	16.20	6.20

2.4.4.2. Sample No. 1 and sample No. 2, test voltage 13.5V, 30 minutes (LUMINANCE ≥ 2cd/m^2).

Luminance Measurements (B) Sample No. 1	1	2	3	4
	3.00	3.40	3.50	3.20
	5	6	7	8
	4.20	5.30	5.90	4.50
	9	10	11	12
	5.40	14.10	14.60	5.90
Luminance Measurements (B) Sample No. 2	1	2	3	4
	3.10	3.50	3.80	3.10
	5	6	7	8
	4.50	5.60	5.80	4.60
	9	10	11	12
	5.70	14.70	15.20	5.80

2.4.4.3. The gradient of the luminance between the values B1 and B2

	Sample No. 1	Sample No. 2
Requirement	Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2\ (cm)} \leq 2 \times Bo / cm$	
Results	Max. of gradient of luminance= 2.20 2 x Bo / cm= 6.00 Complies	Max. of gradient of luminance= 2.35 2 x Bo / cm= 6.20 Complies
Conclusion	Complies	Complies

2.4.4.4. Incidence of the light

	Sample No. 1	Sample No. 2
Requirement	According to this regulation paragraph 7.	
Results	The angle of incidence of the light on the surface of the plate does not exceed 82° at any point on the surface	
Conclusion	Complies	Complies

2.4.4.5. Colour of the light

	Sample No. 1	Sample No. 2
Requirement	According to this regulation paragraph 6.	
Results	The light of the lamp used in the illuminating device is sufficiently colourless not to cause any appreciable change in the colour of the registration plate.	
Conclusion	Complies	Complies

2.5. Colour

2.5.1. Rear position lamp - Red

Sample	Measured values		Limits		Conclusion
	x	y	y ≤ 0.335	y ≥ 0.980 - x	
No. 1	0.6990	0.2997	Yes	Yes	Complies
No. 2	0.6981	0.3003	Yes	Yes	Complies

2.5.2. Stop lamp - Red

Sample	Measured values		Limits		Conclusion
	x	y	y ≤ 0.335	y ≥ 0.980 - x	
No. 1	0.7004	0.2989	Yes	Yes	Complies
No. 2	0.6996	0.2992	Yes	Yes	Complies

2.6. Apparent surface

	Limit (O)	Limit (I)	Limit (U)	Limit (D)
Rear position lamp	61mm	61mm	41mm	41mm
Stop lamp	61mm	61mm	41mm	41mm
License plate lamp	21mm	21mm	12mm	12mm

3.	Specimen submitted to test on	:	2020-05-08 (YYYY-MM-DD)
4.	Place and date of the test	:	Jiangsu Huachen Vehicle Inspection Co., Ltd., Zhenjiang City, P.R. China 2020-05-13 (YYYY-MM-DD)

Shanghai Jason Plastic Co., Ltd.
B3, No. 108, Pengfeng Road, Malu Town,
Jiading District, Shanghai, China

May 8, 2020

Dear Sirs,

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

Function	**ECE approval number**
Stop lamp	E24*50R01/00*0471*00
Rear position lamp	E24*50R01/00*0471*00
Rear-registration plate illuminating lamp	E24*50R01/00*0471*00

Trade name or mark	:	CD
Manufacturer's name for type of device	:	DOT-TAIL-SMK-LP-WIN
Name and address of manufacturer	:	Shanghai Jason Plastic Co., Ltd. B3, No. 108, Pengfeng Road, Malu Town, Jiading District, Shanghai, 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.Cao Jindong
Shanghai Jason Plastic Co., Ltd.

Information folder No. :	DOT-TAIL-SMK-LP-WIN-00
First application date :	May 8, 2020

1. Specification data

Type		DOT-TAIL-SMK-LP-WIN		
Variants		Variant 1: DOT-TAIL-SMK-LP-WIN Variant 2: DOT-TAIL-RED-LP-WIN		
Function		Rear group lamp		
		Stop lamp	Rear position lamp	Rear-registration plate illuminating lamp
Color		Red	Red	Colorless
Rated	Voltage	12V	12V	12V
	Wattage	9.24W	1.56W	0.36W
Application Regulation ECE		R50.01	R50.01	R50.01
Location of marking	Number and category of light source	25*LEDs	10*LEDs	5*LEDs
		Non-replaceable light source		
		Marked on housing		
	Trade mark	CD		
		Marked on lens		
	Approval mark	Marked on lens		

2. Construction and material

Construction		Material	Remarks
Outer lens	Stop lamp + Rear position lamp	PMMA	Variant 1: Smoky grey Variant 2: Red
	Rear-registration plate illuminating lamp	PMMA	Color: Clear
Inner lens	Stop lamp	PMMA	Color: Clear
Light guide	Rear position lamp	PMMA	Color: Clear
Housing		ABS	--
Electrical Wiring		Copper covered with insulation	--

3. Name and address of manufacturer : Shanghai Jason Plastic Co., Ltd.
B3, No. 108, Pengfeng Road, Malu Town,
Jiading District, Shanghai, China

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

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

6: Apparent surface

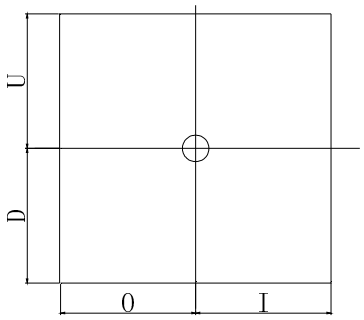
U= Upper limit

D= Down limit

I= Inside limit

O= Outside limit

⊕ :Reference center



Apparent surface based on the

☒ Illuminating surface

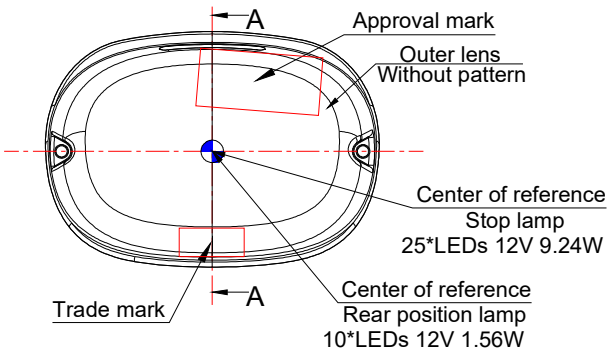
☐ light-emitting surface (with pattern)

☐ light-emitting surface (without pattern)

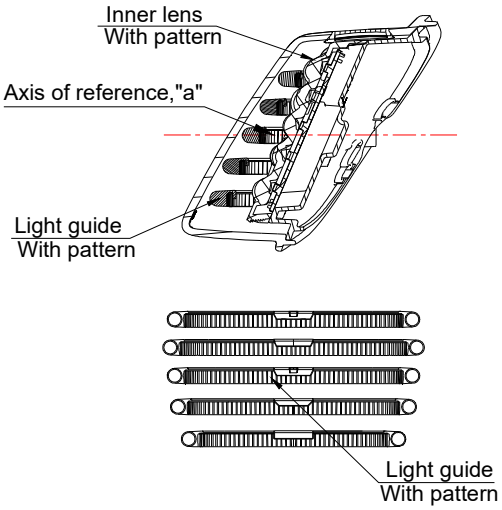
Unit: mm

Function	Limit (O)	Limit (I)	Limit (U)	Limit (D)
Stop lamp	61	61	41	41
Rear position lamp	61	61	41	41
Rear-registration plate illuminating lamp	21	21	12	12
--	--	--	--	--

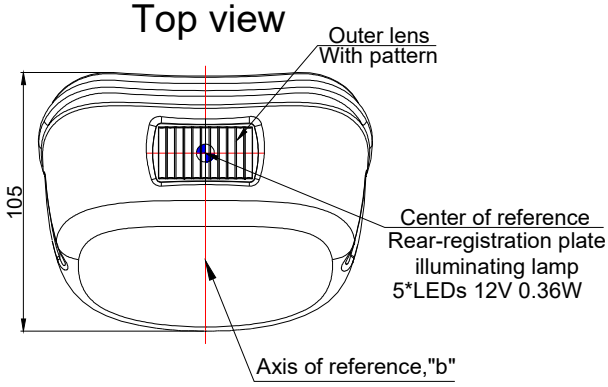
Front view

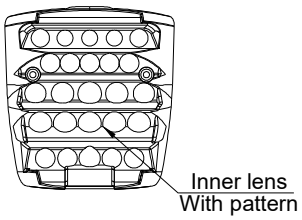


Section A-A



Top view



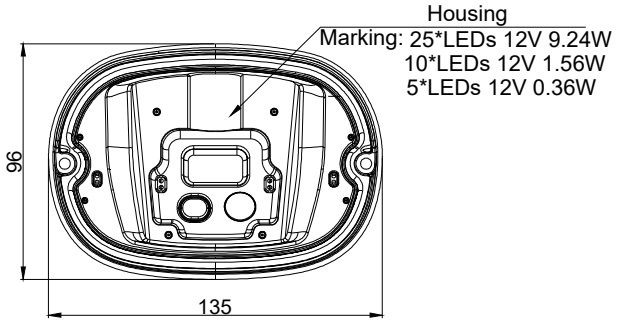


NOTE:
1. "a": Horizontal Plane of Vehicle
2. "b": Longitudinal Plane of Vehicle

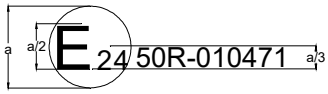
Trade mark

CD

Back view



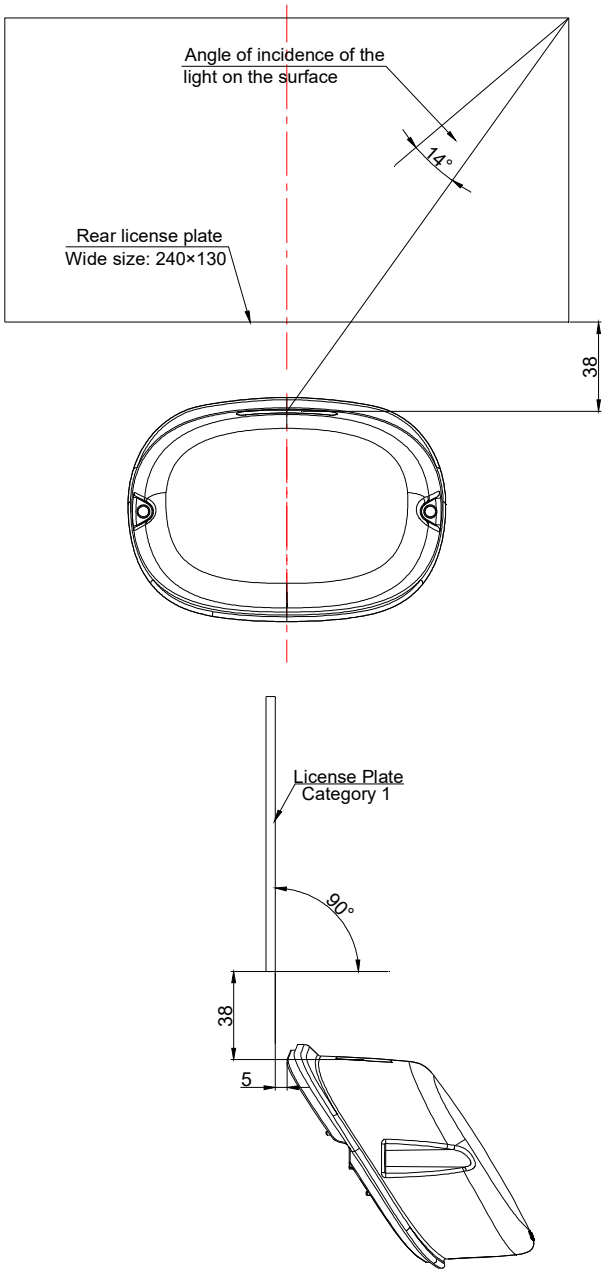
Approval mark



a=5mm min

Product Type	DOT-TAIL-SMK-LP-WIN
General assembly drawing	
Drawing No.	DOT-TAIL-SMK-LP-WIN-01

Installation requirements of rear license plate

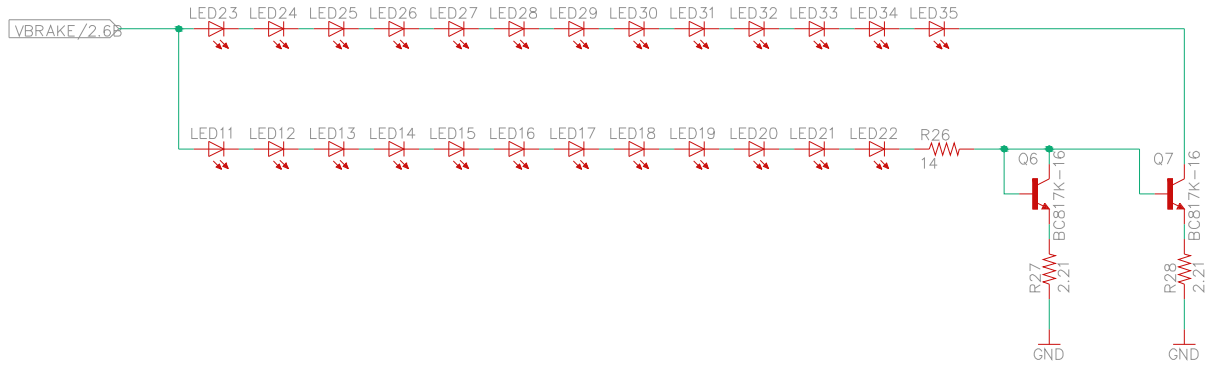


Product Type	DOT-TAIL-SMK-LP-WIN
Installation state	
Drawing No.	DOT-TAIL-SMK-LP-WIN-02

Information folder No. :	DOT-TAIL-SMK-LP-WIN-00
First application date :	May 8, 2020

Stop lamp

25*LEDs 12V 9.24W

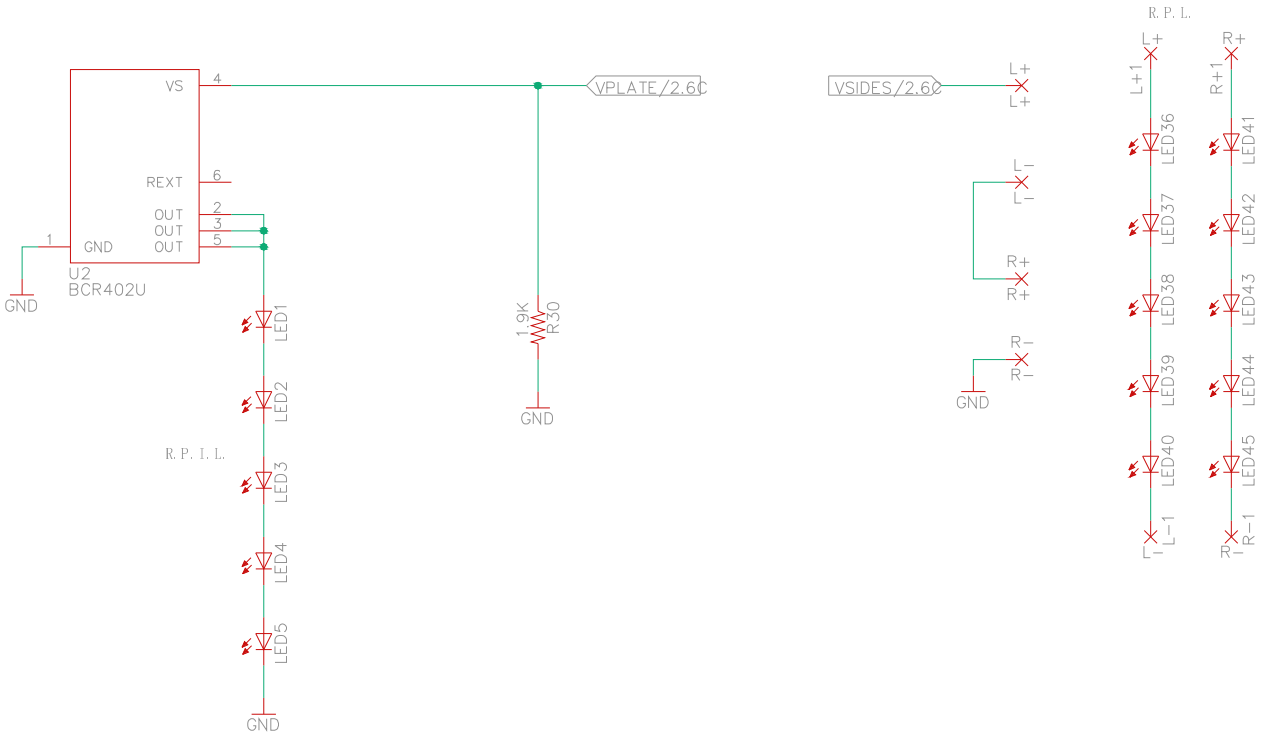


Rear position lamp

10*LEDs 12V 1.56W

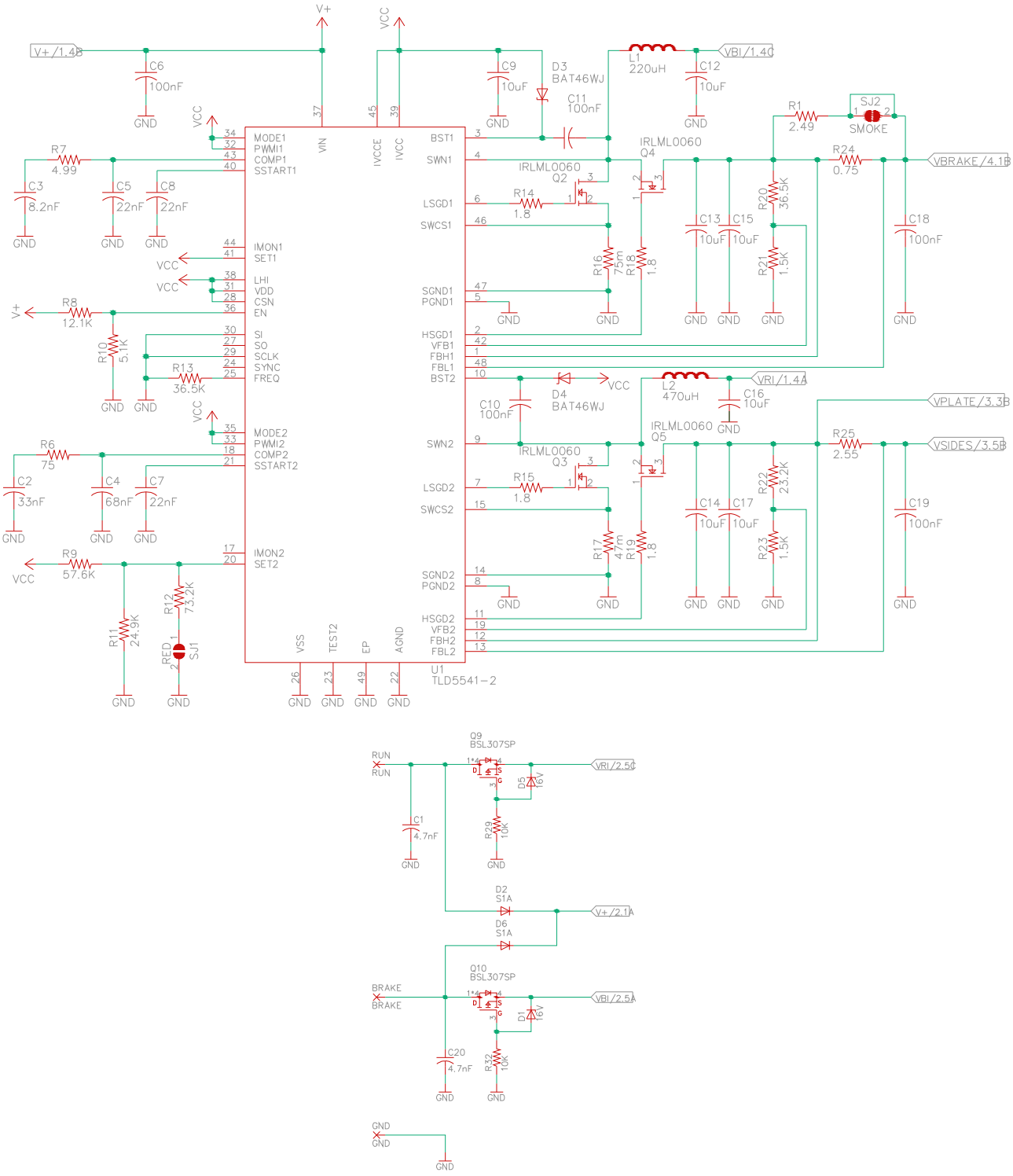
Rear-registration plate illuminating lamp

5*LEDs 12V 0.36W



Product Type	DOT-TAIL-SMK-LP-WIN
Led circuit diagram	
Drawing No.	DOT-TAIL-SMK-LP-WIN-03

Information folder No. :	DOT-TAIL-SMK-LP-WIN-00
First application date :	May 8, 2020



Product Type	DOT-TAIL-SMK-LP-WIN
Led circuit diagram	
Drawing No.	DOT-TAIL-SMK-LP-WIN-04