

#### Index du dossier de réception d'une homologation par type en application d'un Règlement Index to the information package of a type approval with regard to a Regulation

Dernière Série d'amende- ments	N° de la réception de base et	Extension N° Extension No	Révision N° Revision No	Date d'émission Issue date	Fiche de renseignements Information document	
applicable Last applicable Series of amendments	mise à jour			15500 4000	Référence Reference	Nombre de pages Number of pages
7-02	00	-	-	20.04.2016	LUCIDITY 26023N / 00	9

Vu pour être annexé à la fiche de réception, Approved and to be attached to the approval certificate, Le Directeur, The Director,



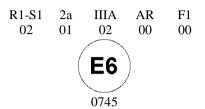
Laurence LEROY

			SREGIONAL PUBLIC
N° d'homologation mis à jour : E6-7R-0	20745		BEVASYS : 3 201600156 2
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Mise à jour N° : $00$	Date d'émission :	20.04.2016	assrug
Update No	Issue date		
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#### COMMUNICATION CONCERNANT L'HOMOLOGATION D'UN TYPE DE DISPOSITIF COMMUNICATION CONCERNING THE APPROVAL OF A TYPE OF DEVICE EN APPLICATION DU REGLEMENT N° 7-02 PURSUANT TO REGULATION Nº 7-02

**N° d'homologation : E6-7R-020745** *Approval No.*  **Marque d'homologation** : Approval mark



- 1. Marque de fabrique ou de commerce du dispositif : LUCIDITY
- 1. Trade name or mark of the device
- 2. Désignation du type de dispositif par le fabricant : 26023N
- 2. Manufacturer's name for the type of device
- 3. Nom et adresse du fabricant :
- 3. Manufacturer's name and address

Lucidity Enterprise Co., Ltd. No. 18, Gongye 1st Road, Annan District, 70955 Tainan City, Taiwan R. O. C.

- 4. Nom et adresse du mandataire du fabricant (le cas échéant) : -
- 4. If applicable, name and address of manufacturer's representative
- 5. Dispositif soumis à l'homologation le : 28.03.2016 ~ 31.03.2016
- 5. Submitted for approval on
- 6. Service technique chargé des essais :
- 6. Technical service responsible for conducting approval tests

AIB VINCOTTE INTERNATIONAL Jan Olieslagerslaan 35 1800 VILVOORDE BELGIUM

- 7. Date du procès-verbal d'essai : 20.04.2016
- 7. Date of test report issued by that service
- 8. Numéro du procès-verbal d'essai : H1560495391/593
- 8. Number of test report issued by that service



- Brève description : <sup>1</sup> voir fiche de renseignements Concise description <sup>1</sup> : see information document 9.
- 9.
- 9.1. Par catégorie de feu : R1-S1 By category of lamp

Pour montage à l'extérieur ou à l'intérieur, ou les deux<sup>2</sup> For mounting either outside or inside or both<sup>2</sup>

Couleur de la lumière émise : rouge / blane<sup>2</sup> Colour of light emitted : red / white<sup>2</sup>

Nombre, catégorie et type de la ou des sources lumineuses : 9LEDs / 9 light sources for rear position lamp and stop lamp *Number and category of light source(s)* 

Tension et puissance :	12V, 0.3W / 24V, 0.5W for rear position lamp
Voltage and wattage	12V, 1.3W / 24V, 1.2W for stop lamp

Code d'identification spécifique du module de la source lumineuse : -Light source module specific identification code

Hauteur de montage limitée à 750 mm au-dessus du sol : oui / non<sup>2</sup> Only for limited mounting height of equal to or less than 750 mm above the ground :  $\frac{1}{2}$  yes / no<sup>2</sup>

Caractéristiques géomtétriques de montage et variantes éventuelles : voir fiche de renseignements Géometric conditions of installation and relating variations, if any

Le dispositif de régulation électronique de la source lumineuse ou du régulateur d'intensité : -Application of an electric light source control gear / variable intensity control :

(a) fait partie du feu :  $\frac{1}{100}$ 

(a) being part of the lamp :  $\frac{1}{2}$  yes / no<sup>2</sup>

(b) ne fait pas partie du feu :  $\frac{1}{0}$  oui / non<sup>2</sup>

(b) being not part of the lamp :  $\frac{1}{2}$  ves / no<sup>2</sup>

Tension d'alimentation du dispositif de régulation électronique de la source lumineuse ou du régulateur d'intensité : -Input voltage supplied by an electronic light source control gear / variable intensity control :

Nom du fabricant et numéro d'identification du dispositif de régulation électronique de la source lumineuse ou du régulateur d'intensité (lorsque le dispositif de régulation de la source lumineuse fait partie du feu mais n'est pas incorporé dans son boîtier) : -

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)

Intensité lumineuse variable : oui / non<sup>2</sup> Variable luminous intensity : yes / no

GIONAL PIT Pour des feux équipés de sources lumineuses non remplaçables, indiquer le nombre et la consommation totale en watt des source For lamps with non-replaceable light sources indicate the number and the total wattage of the light sources Biffer les mentions qui ne conviennent pas - Strike out what does not apply

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9.2. Fonction(s) assurée(s) par un feu interdépendant faisant partie d'un système de feux interdépendants: *Function(s) produced by an interdependent lamp forming part of an interdependent lamp system:* 

Eau da nasition avant	oui/non <sup>2</sup>
Feu de position avant	041, 11011
Front position lamp	<del>yes</del> / no²
Feu de position arrière R1	<del>oui</del> /non <sup>2</sup>
R1 Rear position lamp	<del>yes</del> / no <sup>2</sup>
Feu de position arrière R2	<del>oui</del> /non <sup>2</sup>
R2 Rear position lamp	<del>yes</del> /no <sup>2</sup>
Feu-stop S1	oui/non <sup>2</sup>
S1 Stop lamp	<del>yes</del> / no <sup>2</sup>
Feu-stop S2	<del>oui</del> /non <sup>2</sup>
S2 Stop lamp	<del>yes</del> / no <sup>2</sup>
Feu-stop S3	<del>oui</del> /non <sup>2</sup>
S3 Stop lamp	<del>yes</del> / no <sup>2</sup>
Feu-stop S4	oui/non <sup>2</sup>
S4 Stop lamp	<del>yes</del> / no <sup>2</sup>
Feu d'encombrement	<del>oui</del> /non <sup>2</sup>
End-outline marker lamp	<del>yes</del> /no <sup>2</sup>

- 10. Position de la marque d'homologation : sur la lampe
- 10. Position of the approval mark : on the lamp
- 11. Motif(s) de l'extension d'homologation (le cas échéant) : -
- 11. Reason(s) for extension (if applicable)
- 12. Homologation accordée / étendue<sup>2</sup>
- 12. Approval granted / extended<sup>2</sup>
- 13. Lieu : Bruxelles
- 13. Place
- 14. Date : 20.04.2016 14. Date
- ----
- 15. Signature :
- 15. Signature

AU NOM DU MINISTRE : ON BEHALF OF THE MINISTER Pour le Directeur Général, For the Director General, Le Directeur, The Director,





Laurence LEROY

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- 16. Est annexée la liste des pièces constituant le dossier d'homologation déposé au Service administratif ayant délivré l'homologation et pouvant être obtenu sur demande.
- 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.

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#### AUTOMOTIVE CERTIFICATION Business Class Kantorenpark – Jan Olieslagerslaan 35 – B-1800 Vilvoorde Telephone : +32 (0)2/674.58.85 – Fax : +32 (0)2/674.59.62 E-mail: <u>homologation@vincotte.be</u>

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

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2. <b>REF.</b> :	Report number	: H1560495391/593	No. of pages	: 1 of 15	No. of annexes	8:-
	Bevasys	: 201600156	Approval No.	: (0745 00)	Update	: 00

#### 3. GENERALITIES :

Make of Device : LUCIDITY Commercial Type : -Manufacturer's Type : 26023N Name and address of the manufacturer :

Lucidity Enterprise Co., Ltd. No. 18, Gongye 1st Road, Annan District, 70955 Tainan City, Taiwan R. O. C.

4.	TESTS :	Date and place	: 2016.03.28 to 2016.03.31
		Applied document(s)	Lucidity Enterprise Co., Ltd – Photometric Laboratory : LUCIDITY 26023N / 00
		AVI 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 22 to the 02 series of amendments.

The models presented comply with the requirements to be applied.



Date : 2016.04.20

Signature :



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# DESCRIPTION OF THE TESTED LAMP

Lamp type	:	Rear position lamp reciprocally incorporated with stop lamp
Lamp category	:	R1-S1
Category and kind of light source(s)	:	LED
Number of light source(s)	:	9LEDs / 9 light sources for rear position lamp and stop lamp
Voltage and wattage	:	12V, 0.3W / 24V, 0.5W for rear position lamp
		12V, 1.3W / 24V, 1.2W for stop lamp

#### GENERAL SPECIFICATIONS

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
Each device supplied shall conform to the specifications set forth in § 6 and 8 below.	5.1.	Х	
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.	Х	
Lamps having been approved as front or Rear position lamps, are deemed being also approved end-outline marker lamps.	5.3.		Х
Front and Rear position lamps which are grouped or combined or reciprocally incorporated may also be used as end-outline marker lamps.	5.4.		Х
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.	Х	
<ul><li>However, in the case of Rear position lamp reciprocally incorporated with a stop lamp, the device shall either:</li><li>(a) Be a part of a multiple light source arrangement, or</li><li>(b) Be intended for use in a vehicle equipped with a failure monitoring system for that function.</li><li>In either case, a note shall be made within the communication document.</li></ul>	5.5.1.	Х	х
In the case of light source modules, it shall be checked that:	5.6.		Х
<ul><li>The design of the light source module(s) shall be such as:</li><li>(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);</li><li>(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.</li></ul>	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		Х





Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
<ul> <li>In case of failure of the variable intensity control of:</li> <li>(a) A Rear position lamp category R2 emitting more than the maximum value of category R or R1;</li> <li>(b) A rear end-outline marker lamp category RM2 emitting more than the maximum value of category RM1;</li> <li>(c) A Stop lamp category S2 emitting more than the maximum value of category S1;</li> <li>(d) A Stop lamp category S4 emitting more than the maximum value of category S3;</li> <li>requirements of steady luminous intensity of the respective category shall be fulfilled automatically</li> </ul>	5.8.		Х
In the case of replaceable light source(s):	5.9.		Х
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.	5.9.1.		
The design of the device shall be such that the light source can be fixed in no other position but the correct one.	5.9.2.		
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.	5.9.3.		
An interdependent lamp system shall meet the requirements when all its interdependent lamps are operated together. However, if the interdependent lamp system providing the Rear position lamp function is partly mounted on the fixed component and partly mounted on a movable component, the interdependent lamp(s) specified by the Applicant shall meet the outboard geometric visibility, colorimetric and photometric requirement, at all fixed positions of the movable component(s). In this case, the inboard geometric visibility requirement is deemed to be satisfied if this (these) interdependent lamp(s) still conform to the photometric values prescribed in the field of light distribution for the approval of the device, at all fixed positions of the moveable component(s)."	5.10.		Х





## INTENSITY OF LIGHT EMITTED

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
The light emitted by each of the two devices supplied shall be in the reference axis, of not less than the minimum intensity and of not more than the maximum intensity specified below:	6.1.		
Front position lamps, front end-outline marker lamp A or AM (see 6.1.1.)	6.1.1.		Х
Front position lamps incorporated in a headlamp (see 6.1.2.)	6.1.2.		Х
Rear position lamps, rear end-outline marker lamp (see 6.1.3.)	6.1.3.		
R, R1 or RM1 (steady)	6.1.3.1.	Х	
R2 or RM2 (variable)	6.1.3.2.		Х
Stop-lamps	6.1.4.		
S1 (steady)	6.1.4.1.	Х	
S2 (variable)	6.1.4.2.		Х
S3 (steady)	6.1.4.3.		Х
S4 (variable)	6.1.4.4.		Х
For an assembly of two or more lamps the total intensity shall not exceed the maximum value prescribed for a single lamp.	6.1.5.		Х
When an assembly of two independent lamps to be type approved as "D" lamps having the same function is deemed to be a single lamp, it shall comply with the requirements for: (a) Maximum intensity if all lamps together are lit	6.1.6.		Х
(b) Minimum intensity if one lamp has failed.			





Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
In case a failure of a single lamp containing more than one light source the following provisions shall apply:	6.1.7.		
A group of light sources, wired so that the failure of any one of them causes all of them to stop emitting light, shall be considered to be one light source.	6.1.7.1.	Х	
The lamp shall comply with the minimum intensity required when any one light source has failed. However, for lamps designed for only two light sources, 50% of the minimum intensity in the axis of reference of the lamp shall be considered sufficient, provided that a note in the communication form states that the lamp is only for use on a vehicle fitted with an operating tell-tale which indicates when any one of these two light sources has failed;	6.1.7.2.		Х
Outside the reference axis and within the angular fields defined in the diagrams in Annex1 to this Regulation, the intensity of the light emitted by each of the two devices supplied must:	6.2.		
In each direction corresponding to the points in the light distribution table reproduced in Annex 4 to this Regulation, be not less than the product of the minimum specified in the table of §6.1 above, by the percentage specified in the said table of the direction in question;	6.2.1.	Х	
In no direction within the space from which the light-signalling device is visible, exceed the maximum specified in the table of §6.1. above;	6.2.2.	Х	
However, a luminous intensity of 60cd shall be permitted for Rear position lamps reciprocally incorporated with stop-lamps (see 6.1.3. above) below a plane forming an angle of 5° with and downward from the horizontal plane;	6.2.3.	Х	
Moreover,	6.2.4.		
Throughout the fields defined in the diagrams in Annex 1, the luminous intensity of the light emitted must be not less than 0.05cd for front and Rear position lamps and end- outline marker lamps, not less than 0.3cd for devices of categories S1, S3 and for those of categories S2 and S4 by day; it shall not be less than 0.07 cd for devices of categories S2 and S4 by night;	6.2.4.1.	Х	
If a Rear position lamp is reciprocally incorporated with a stop-lamp producing either steady or variable luminous intensity, 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 should be at least $5:1$ in the field delimited by the straight horizontal lines passing through $\pm 5^{\circ}$ V and the straight vertical lines passing through $\pm 10^{\circ}$ H of the light distribution table.	6.2.4.2.	Х	
If the Rear position lamp or the Stop lamp or both contain more than one light source and are considered as a single lamp, the values to be considered are those obtained with all sources in operation;			
The provisions of § 2.2. of Annex 4 to this Regulation on local variations of intensity must be observed.	6.2.4.3.	Х	





Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
The intensities shall be measured with the light source(s) continuously alight and, in the case of devices emitting red light, in coloured light.	6.3.	Х	
In the case of devices of categories R2, RM2, S2 and S4 the time that elapses between energising the light source(s) and the light output measured on the reference axis to reach 90 per cent of the value measured in accordance with paragraph 6.3. above shall be measured for the extreme levels of luminous intensity produced by the device. The time measured to obtain the lowest luminous intensity shall not exceed the time measured to obtain the highest luminous intensity.	6.4.		Х
The variable intensity control shall not generate signals which cause luminous intensities : outside the range specified in § 6.1. above and	6.5. 6.5.1.		Х
<ul> <li>exceeding the respective steady luminous intensity maximum specified in § 6.1. for the specific device</li> <li>(a) for systems depending only on day time and night time conditions : under night time conditions</li> <li>(b) for other systems: under standard conditions <sup>1</sup></li> </ul>	6.5.2.		
Annex 4, to which reference is made in § 6.2.1. above, gives particulars of the methods of measurement to be used.	6.6.	Х	

<sup>1</sup> Good visibility (meteorological optical range MOR > 2,000 m defined according to WMO, Guide to Meteorological Instruments and Methods of Observation, Sixth Edition, ISBN: 92-63-16008-2, pp 1.9.1/1.9.11, Geneva 1996) and clean lens

#### **TEST PROCEDURE**

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
All measurements, photometric and colorimetric, shall be made:	7.1.		
In case of a lamp with replaceable light source, if not supplied by an electronic light source control gear or a variable intensity control, with an uncoloured or coloured standard light source of the category prescribed for the device, supplied with the voltage.	7.1.1.		Х
<ul><li>(a) In the case of filament lamp(s), that is necessary to produce the reference luminous flux required for that category of filament lamp;</li></ul>			
(b) In the case of LED light source(s) of 6.75 V, 13.5 V or 28.0 V; the luminous flux value produced shall be corrected. The correction factor is the ratio between the objective luminous flux and the value of the luminous flux found at the voltage applied.			
In the case of a lamp equipped with non-replaceable light sources (filament lamps and other), at 6.75 V, 13.5 V or 28.0 V respectively.	7.1.2.	Х	
In the case of a system that uses an electronic light source control gear or a variable intensity control, being part of the lamp $\underline{6}$ / applying at the input terminals of the lamp the voltage declared by the manufacturer or, if not indicated, 6.75 V, 13.5 V or 28.0 V respectively.	7.1.3.	REGIONAL PUB	X
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Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
In the case of a system that uses an electronic light source control gear or a variable intensity control, not being part of the lamp the voltage declared by the manufacturer shall be applied to the input terminals of the lamp.	7.1.4.		Х
However, in the case of light sources operated by a variable intensity control to obtain variable luminous intensity, photometric measurements shall be performed according to the applicant's description.	7.2.		Х
The test laboratory shall require from the manufacturer the light source control gear or a variable intensity control needed to supply the light source and the applicable functions.	7.3.		Х
The voltage to be applied to the lamp shall be noted in the communication form in Annex 2 of this Regulation.	7.4.	Х	
The limits of the apparent surface in the direction of the reference axis of a light- signaling device shall be determined.	7.5.	Х	
In the case of a category S3 or S4 stop lamp, which is intended to be mounted inside the vehicle a sample plate or sample plates (in case of different possibilities) as supplied (see § 2.2.5.) shall be positioned in front of the lamp to be tested, in the geometrical position(s) as described in the application drawing(s) (see § 2.2.1.).	7.6.		х

## COLOUR OF LIGHT EMITTED

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
The colour of the light emitted inside the field of the light distribution grid defined in § 2 of Annex 4 shall be red or white. Outside this field, no sharp variation of colour shall be observed. To check these colorimetric characteristics, the test procedure described in § 7 shall be applied.	8.	Х	
However, for lamps equipped with non-replaceable light sources (filament lamps and other), the colorimetric characteristics should be verified with the light sources present in the lamp, in accordance with the relevant subparagraph of § 7.1. In case of a Category S3 or S4 stop lamp, which is intended to be mounted inside the vehicle, the colorimetric characteristics shall be verified with the worst case combination(s) of the lamp and rear window(s) or sample plate(s). These requirements shall also apply within the range of variable luminous intensity produced by: (a) Rear position lamps of category R2; (b) rear end-outline marker lamps of category RM2; (c) stop lamps of categories S2 and S4.			





# FRONT AND REAR POSITION (SIDE) LAMPS, END-OUTLINE MARKER LAMPS AND STOP-LAMPS : MINIMUM ANGLES REQUIRED FOR LIGHT DISTRIBUTION IN SPACE OF THESE LAMPS $^1$ (ANNEX 1)

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
In all cases, the minimum vertical angles of light distribution in space are 15° above and 15° below the horizontal for all categories of devices included in this Regulation		Х	
except : (a) For lamps intended to be installed with their H plane at a mounting height less than			х
750 mm above the ground, for which they are 15° above and 5° below the horizontal			Λ
(b) Optional lamps intended to be installed with their H plane at a mounting height more than 2,100 mm above the ground, for which they are 5° above and 15° below the horizontal			Х
<ul> <li>(c) for category S3 or S4 Stop lamp for which they are 10° above and 5° below the horizontal;</li> </ul>			Х
Minimum horizontal angles of light distribution in space			
Front position lamps, (see annex 1)			Х
On and above the H plane for all lamps			
Under the H plane for front position lamps intended to be installed with this plane			
at a mounting height less than 750 mm above ground.			
Front End-outline marker lamp (AM) (see annex 1)			Х
Rear End-outline marker lamp (RM1, RM2) (see annex 1)			Х
Rear position lamps (see annex 1)		Х	
Under the H plane for Rear position lamps intended to be installed with this plane			
at a mounting height less than 750 mm above ground.			
Stop lamps (S1 and S2) (see annex 1)		Х	
Under the H plane for stop lamps (S1 and S2) intended to be installed with this			
plane at a mounting height less than 750 mm above ground.			
Stop lamps (S3 and S4) (see annex 1)			Х

The angles shown in these diagrams are correct for devices to be mounted on the right side of the vehicle. The arrows point to the front of the vehicle.





## PHOTOMETRIC MEASUREMENTS (ANNEX 4)

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
Measurement methods	1.		
During photometric measurements, stray reflections shall be avoided by appropriate masking.	1.1.	Х	
In case the results of measurements should be challenged, measurements shall be carried out in such a way as to meet the following requirements :	1.2.		
The distance of measurements shall be such that the law of the inverse of the square of the distance is applicable;	1.2.1.	Х	
The measuring equipment shall be such that the angular aperture of the receiver viewed from the reference centre of the light is comprised between 10' and 1 degree;	1.2.2.	Х	
The intensity requirements for a particular direction of observation shall be deemed to be satisfied if that requirement is met in a direction deviating by not more than one- quarter of a degree from the direction of observation.	1.2.3.	Х	
In the case where the device may be installed on the vehicle in more than one or in a field of different positions the photometric measurements shall be repeated for each position or for the extreme positions of the field of the reference axis specified by the manufacturer.	1.3.		Х
Table of standard light distribution	2.		
The direction $H = 0^{\circ}$ and $V = 0^{\circ}$ corresponds to the reference axis. (On the vehicle, it is horizontal, parallel to the median longitudinal plane of the vehicle and oriented in the required direction of visibility.) It passes through the centre of reference. The values shown in the tables give, for the various directions of measurement, the minimum intensities as a percentage of the minimum required in the axis for each lamp (in the direction $H = 0^{\circ}$ and $V = 0^{\circ}$ ).	2.1.	Х	
Within the field of light distribution of § 2., schematically shown as a grid, the light pattern should be substantially uniform, i.e. the light intensity in each direction of a part of the field formed by the grid lines shall meet at least the lowest minimum value being shown on the grid lines surrounding the questioned direction as a percentage.	2.2.	Х	
However, in the case where a device is intended to be installed at a mounting height of equal to or less than 750 mm above the ground, the photometric intensity is verified only up to an angle of $5^{\circ}$ downwards.	2.3.		Х
Photometric measurements of lamps	3.		
The photometric performance shall be checked :			
For non-replaceable light sources (filament lamps and other) :	3.1.	Х	
with the light sources present in the lamp, in accordance with the relevant sub- paragraph of § 7.1. of this Regulation			



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Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
For replaceable light source(s):	3.2.		Х
when equipped with light source(s) at 6.75 V, 13.5 V or 28.0 V, the luminous intensity values produced shall be corrected. For filament lamps the correction factor is the ratio between the reference luminous flux and the mean value of the luminous flux found at the voltage applied (6.75 V, 13.5 V or 28.0 V). For LED light sources the correction factor is the ratio between the objective luminous flux and the mean value of the luminous flux and the mean value of the voltage applied (6.75 V, 13.5 V or 28.0 V). For LED light sources the correction factor is the ratio between the objective luminous flux and the mean value of the luminous flux found at the voltage applied (6.75 V, 13.5 V or 28.0 V). The actual luminous fluxes of each light source used shall not deviate more than 5 per cent from the mean value. Alternatively and in case of filament lamps only, a standard filament lamp may be used in turn, in each of the individual positions, operated at its reference flux, the individual measurements in each position being added together.			
For any signalling lamp except those equipped with filament lamp(s), the luminous intensities, measured after one minute and after 30 minutes of operation, shall comply with the minimum and maximum requirements. The luminous intensity distribution after one minute of operation can be calculated from the luminous intensity distribution after 30 minutes of operation by applying at each test point the ratio of luminous intensities measured at HV after one minute and after 30 minutes of operation.	3.3.	Х	

### COLOUR OF LIGHTS : CHROMATICITY CO-ORDINATES (ANNEX 5)

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
For checking the colorimetric characteristics, the test procedure described in §7 shall be applied.		Х	
However, for lamps equipped with non-replaceable light sources (filament lamps and other), the colorimetric characteristics should be verified with the light sources present in the lamp, in accordance with the relevant sub-paragraph of §7.1.			
In the case of a Category S3 or S4 stop lamp, which is intended to be mounted inside the vehicle, the colorimetric characteristics shall be verified with the worst case combination(s) of lamp and rear window(s) or sample plate(s).			

#### FACILITIES AND EQUIPMENT

The facilities and equipment used to carry out the inspections are in compliance with the requirements of the applied Regulatory Act(s).

Tested by Lucidity Enterprise Co., Ltd - Photometric Laboratory





# **TEST RESULTS :**

Light sources : 9LEDs / 9 light sources ; Rated voltage and wattage : 12V, 0.3W / 24V, 0.5W

			ometric Mea	surement		
Lamp Function : Rea	r position lam	р		Test Voltage	: 13.	5 / 28 V
Category : R1				Test Distance	e : 3	8.16 m
Requirement : ECH	E Reg. 7 Para.	6				
Point on	Requirer	ment (cd)		LH (24V) ement (cd)	•	RH (12V) ement (cd)
Measuring Screen	Min	Max	1 Minute	30 Minutes	1 Minute	30 Minutes
10U - 5L	0.8	17	1.50	1.48	2.28	2.29
10U - 5R	0.8	17	1.60	1.57	2.74	2.75
5U - 20L	0.4	17	1.29	1.27	2.72	2.73
5U - 10L	0.8	17	3.39	3.34	7.12	7.16
5U - V	2.8	17	7.75	7.63	7.39	7.43
5U - 10R	0.8	17	4.11	4.05	8.32	8.36
5U - 20R	0.4	17	1.52	1.50	3.17	3.19
H - 10L	1.4	17	11.95	11.76	8.82	8.87
H - 5L	3.6	17	9.50	9.35	7.74	7.78
H - V	4	17	8.90	8.76	7.51	7.55
H - 5R	3.6	17	8.90	8.76	7.96	8.00
H - 10R	1.4	17	9.63	9.48	8.75	8.80
5D - 20L	0.4	60	3.99	3.93	1.53	1.54
5D - 10L	0.8	60	8.26	8.13	4.52	4.54
5D - V	2.8	60	7.70	7.58	6.49	6.52
5D - 10R	0.8	60	7.28	7.17	4.87	4.90
5D - 20R	0.4	60	3.11	3.06	1.58	1.59
10D - 5L	0.8	60	2.61	2.57	1.76	1.77
10D - 5R	0.8	60	2.91	2.86	1.92	1.93
	0.05	-	0.071	0.070	0.080	0.080
Visibility Zone Scan	-	17	14.336	14.110	11.031	11.090
Test Results		Passed			☐ Failed	





Light sources : 8LEDs /	o light sources ( one	light source (111	SD) has failed)		
Test Results	<u>of Photometric Mea</u>	<u>surement (Any</u>	one light sources has	<u>failed</u> )	
Lamp Function : Rea	r position lamp		Test Voltage	: 13.5 / 28 V	
Category : R1			Test Distance : 3.16 m		
Requirement : EC	E Reg. 7 Para. 6				
Point on	Requirer	ment (cd)	Measurement (cd)		
Measuring Screen	Min	Max	Sample RH (12V)	Sample RH (24V)	
10U - 5L	0.8	17	2.20	2.19	
10U - 5R	0.8	17	2.60	2.60	
5U - 20L	0.4	17	2.25	2.25	
5U - 10L	0.8	17	7.48	7.47	
5U - V	2.8	17	9.14	9.12	
5U - 10R	0.8	17	8.87	8.87	
5U - 20R	0.4	17	2.33	2.33	
H - 10L	1.4	17	10.09	10.06	
H - 5L	3.6	17	9.60	9.57	
H - V	4	17	8.93	8.91	
H - 5R	3.6	17	8.77	8.74	
H - 10R	1.4	17	10.00	9.96	
5D - 20L	0.4	60	1.55	1.54	
5D - 10L	0.8	60	4.99	4.96	
5D - V	2.8	60	6.77	6.75	
5D - 10R	0.8	60	6.03	6.00	
5D - 20R	0.4	60	2.03	2.02	
10D - 5L	0.8	60	1.96	1.95	
10D - 5R	0.8	60	2.18	2.18	
	0.05	-	0.070	0.070	
Visibility Zone Scan	-	17	13.870	13.830	
Test Results	■ P	assed	F	Failed	

Light sources : 8LEDs / 8 light sources ( one light source (1LED) has failed)

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# **TEST RESULTS :**

Light sources : 9LEDs / 9 light sources ; Rated voltage and wattage : 12V, 1.3W / 24V, 1.2W

	<u>Test Re</u>		ometric Mea			
Lamp Function : St	op lamp			Test Voltage	: 13	.5/28 V
Category : S1				Test Distance	e :	3.16 m
Requirement : E0	CE Reg. 7 Para.	6				
Point on	Require	ment (cd)	·	LH (24V) ement (cd)		RH (12V) ement (cd)
Measuring Screen	Min	Max	1 Minute	30 Minutes	1 Minute	30 Minutes
10U - 5L	12	260	18.4	17.6	24.1	23.1
10U - 5R	12	260	19.5	18.8	27.7	26.6
5U - 20L	6	260	15.7	15.1	27.5	26.3
5U - 10L	12	260	41.4	39.7	75.7	72.5
5U - V	42	260	94.2	90.4	111.3	106.5
5U - 10R	12	260	50.3	48.3	94.8	90.8
5U - 20R	6	260	18.7	17.9	32.7	31.3
H - 10L	21	260	144.6	138.8	129.9	124.4
H - 5L	54	260	115.2	110.6	108.9	104.2
H - V	60	260	108.0	103.7	107.0	102.5
H - 5R	54	260	108.1	103.8	118.1	113.1
H - 10R	21	260	116.7	112.0	138.1	132.2
5D - 20L	6	260	49.1	47.1	23.8	22.8
5D - 10L	12	260	101.3	97.2	65.5	62.7
5D - V	42	260	93.7	89.9	93.9	89.9
5D - 10R	12	260	89.0	85.4	70.6	67.6
5D - 20R	6	260	38.5	36.9	24.3	23.2
10D - 5L	12	260	32.2	30.9	23.8	22.8
10D - 5R	12	260	35.9	34.5	25.4	24.3
	0.3	-	4.00	3.84	4.37	4.18
Visibility Zone Sca	n	260	176.79	169.70	188.74	180.72
Test Results		Passed			E Failed	
					2010	







rces: 8LEDs / 8	B light sources ( one	e light source (1LEE	D) has failed)	
<u>Test Results o</u>	<u>f Photometric Me</u>	asurement (Any o	ne light sources has	failed)
nction : Stop	lamp	,	Test Voltage	: 13.5 / 28 V
: S1		,	Test Distance	: 3.16 m
nent : ECE	Reg. 7 Para. 6			
Point on	Require	ment (cd)	Measure	ment (cd)
suring Screen	Min	Max	Sample RH (12V)	Sample RH (24V)
J - 5L	12	260	28.52	26.44
J - 5R	12	260	33.67	31.25
		260	20.22	27.19

Light sources : 8LEDs / 8 light source

Requirement : ECE Reg. 7 Para. 6
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Lamp Function : Stop lamp

Category : S1

Point on		Require	ment (cd)	Measure	Measurement (cd)			
Measuring Sc	reen	Min	Max	Sample RH (12V)	Sample RH (24V)			
10U - 51	L	12	260	28.52	26.44			
10U - 51	R	12	260	33.67	31.25			
5U - 20	0L	6	260	29.32	27.18			
5U - 10	0L	12	260	96.79	89.72			
5U - V	r	42	260	117.33	108.95			
5U - 10	0R	12	260	114.14	106.06			
5U - 20	0R	6	260	30.17	28.012			
H - 10	0L	21	260	129.59	120.22			
H - 51	L	54	260	123.01	114.14			
H - V	r	60	260	114.54	106.36			
H - 51	R	54	260	112.34	104.37			
H - 10	0R	21	260	127.89	118.82			
5D - 20	0L	6	260	20.03	18.58			
5D - 10	0L	12	260	64.28	59.70			
5D - V	r	42	260	87.02	80.92			
5D - 10	0R	12	260	77.55	72.15			
5D - 20	0R	6	260	26.04	24.24			
10D - 51	L	12	260	25.21	23.41			
10D - 51	R	12	260	28.06	26.10			
		0.3	-	4.28	3.89			
Visibility Zon	ne Scan	-	260	191.04	175.84			
Test Resul	ts	P	assed	F	Failed			





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Test Results of Colour Measurement							
Lamp Function : Stop lamp							
Requirement	: ECE Reg. 7 Para	8					
Light Emitted Color	: Red						
Color Boundaries	- Limit towards ye	ellow : $y \le 0.335$					
	- Limit towards pu	The $y \ge 0.980$	- X				
Test Points	Sample LH (24)	V) Measurement	Sample RH (12)	Sample RH (12V) Measurement			
Test Points	Colour x	Colour y	Colour x	Colour y			
5U - V	0.6924	0.3076	0.6918	0.3082			
H - 5L	0.6927	0.3070	0.6920	0.3080			
H - V	0.6928	0.3069	0.6919	0.3081			
H - 5R	0.6932	0.3068	0.6923	0.3077			
5D - V	0.6931	0.3069	0.6924	0.3076			
Test Results	P	Passed	F	ailed			

(Null below)





Lucidity Enterprise Co., Ltd. No. 18, Gongye 1st Road, Annan District, 70955 Tainan City, Taiwan R. O. C.

# **COMBINATION TAILLAMP**

# LUCIDITY 26023N

**Application: original Date: January 04, 2016** 

**Total number of pages: 9** 



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



### Manufacturer name and address: Lucidity Enterprise Co., Ltd. No. 18, Gongye 1st Road, Annan District, 70955 Tainan City, Taiwan R. O. C.

Trade name or mark

: LUCIDITY

Type of device

: 26023N

**SPECIFICATIONS** 



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

Function-Application-class category lamp and colour

Trade name or mark		LUCIDITY							
Function		Reflex reflector	Rear direction indicator	Rear <sup>(1)</sup> position lamp	Stop lamp (1)	Reversing <sup>(2)</sup> lamp	Rear <sup>(3)</sup> fog lamp		
ECE Regulation		3-02 Supplement 14	6-01 Supplement 24	7-02 Supplement 22	7-02 Supplement 22	23-00 Supplement 19	38-00 Supplement 16		
Class		-	-	-	-	-	-		
Category		IIIA	2a	R1	<b>S</b> 1	-	F1		
	r, category and lamp source(s)	-	9LEDs / 9 light sources	9LEDs / 9 light sources	9LEDs / 9 light sources	16LEDs / 16 light sources	16LEDs / 16 light sources		
Voltage and wattage		-	12V, 2.6W 24V, 2.6W	12V, 0.3W 24V, 0.5W	12V, 1.3W 24V, 1.2W	12V, 2.7W 24V, 2.8W	12V, 2.2W 24V, 2.3W		
Long	Outer	Red	Clear	Red	Red	Clear	Red		
Lens	Filter (Inner)	-	-	-	-	Clear	-		
Colour	Colour of light emitted		Amber	Red	Red	White	Red		

<sup>(1)</sup> Rear position lamp reciprocally incorporated with stop lamp. <sup>(2)</sup> Reversing lamp shall be installed in a pair of devices.

<sup>(3)</sup> Rear fog lamp shall be installed in a pair of devices.

# **TECHNICAL DATA**

Part		Material	Remark
Lang	Outer	PC	-
Lens	Filter (Inner)	PC	-
Reflector		-	-
Housi	ng	PC	-

### MARKING

Mar	Location	
Trade name or mark	LUCIDITY	Sasarawing
Approval marks	0745	See drawing
		Bu

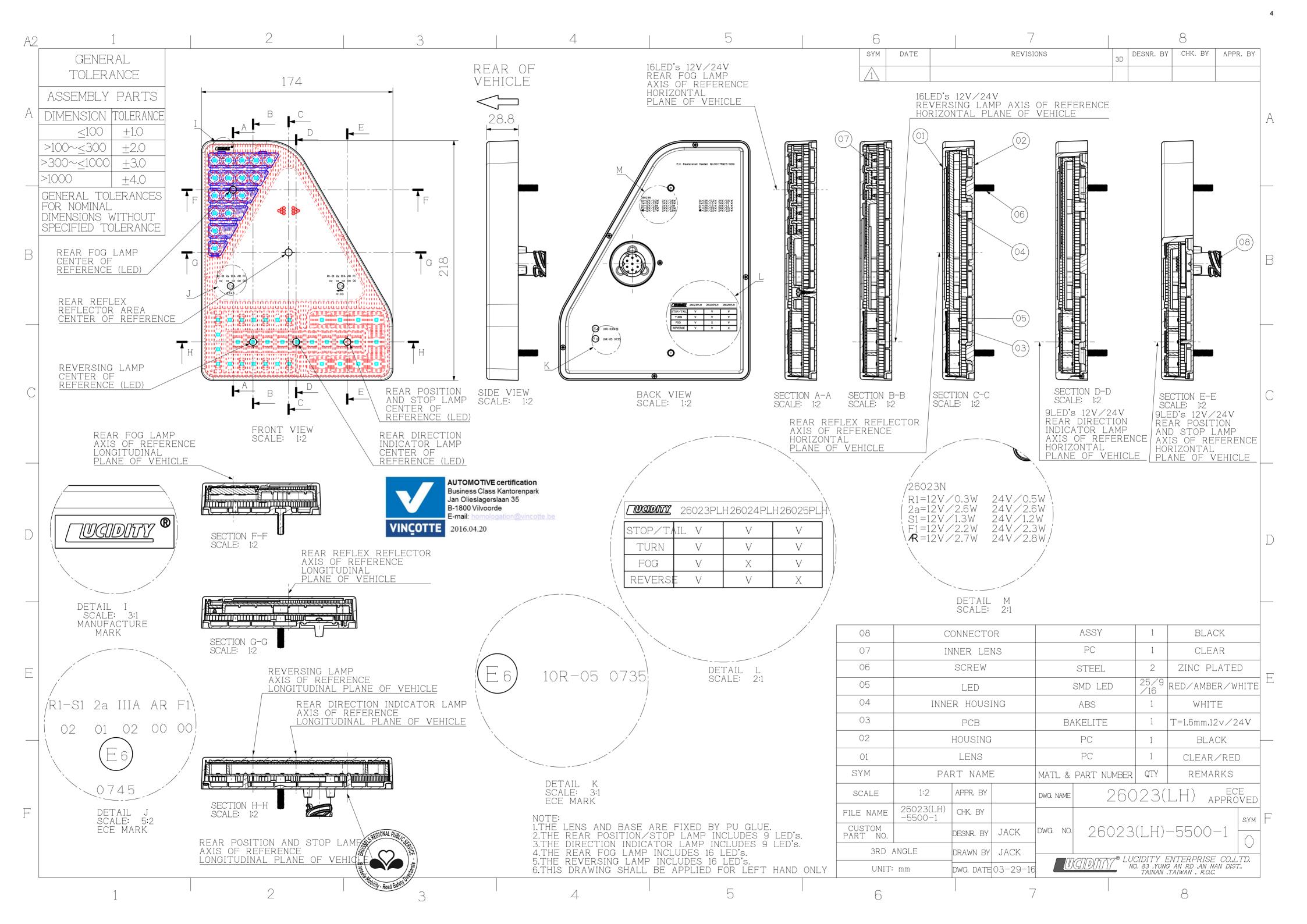
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<b>Reference</b> Version						
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26023-LAYOUT-5500-2	2016.03.29					
26023(LH)-5500-3	2016.03.25					
26023(RH)-5500-4	2016.03.25					
26023-LAYOUT-5500-5	2016.03.29					
26023(RH)-5500-6	2016.03.29					

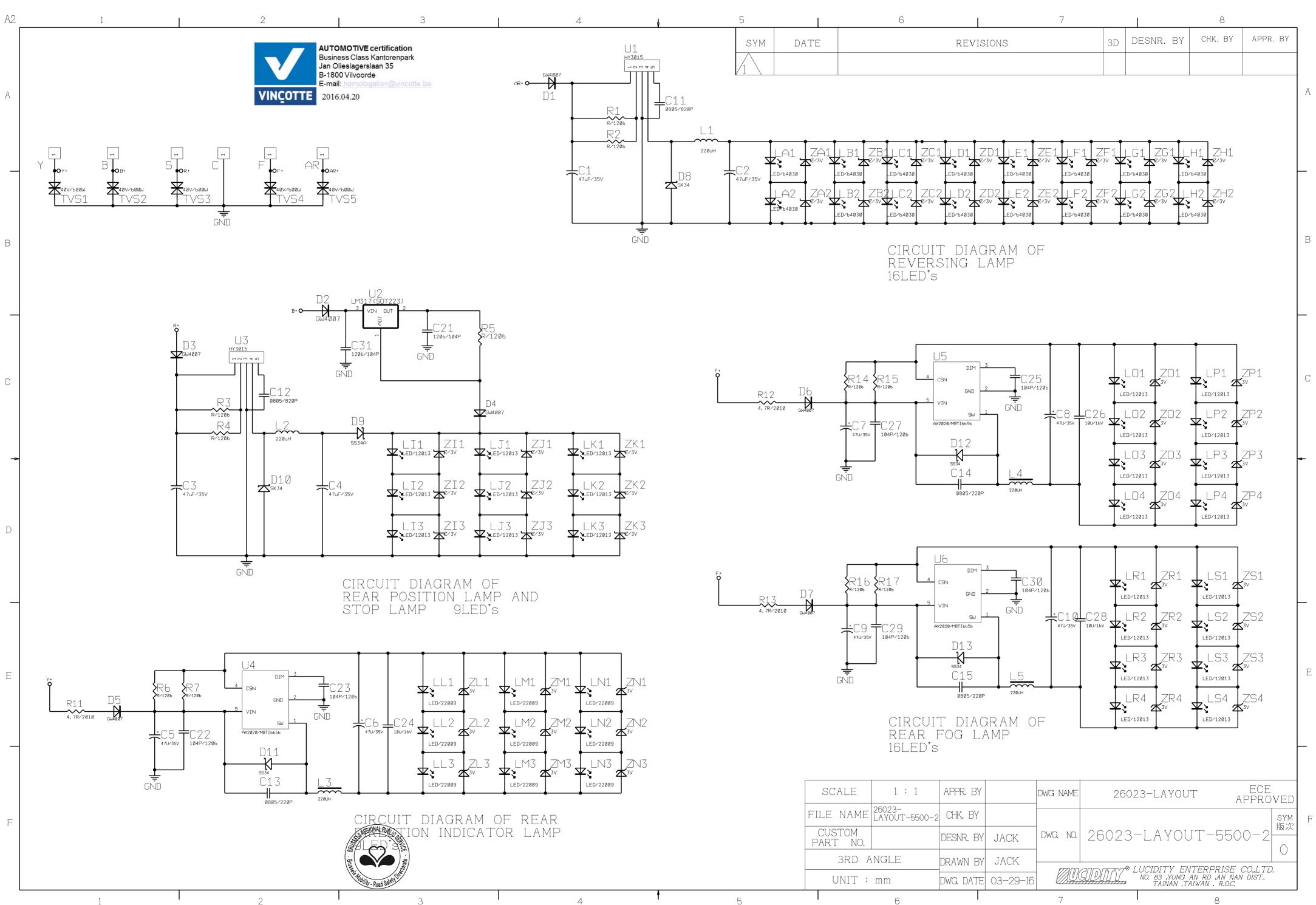
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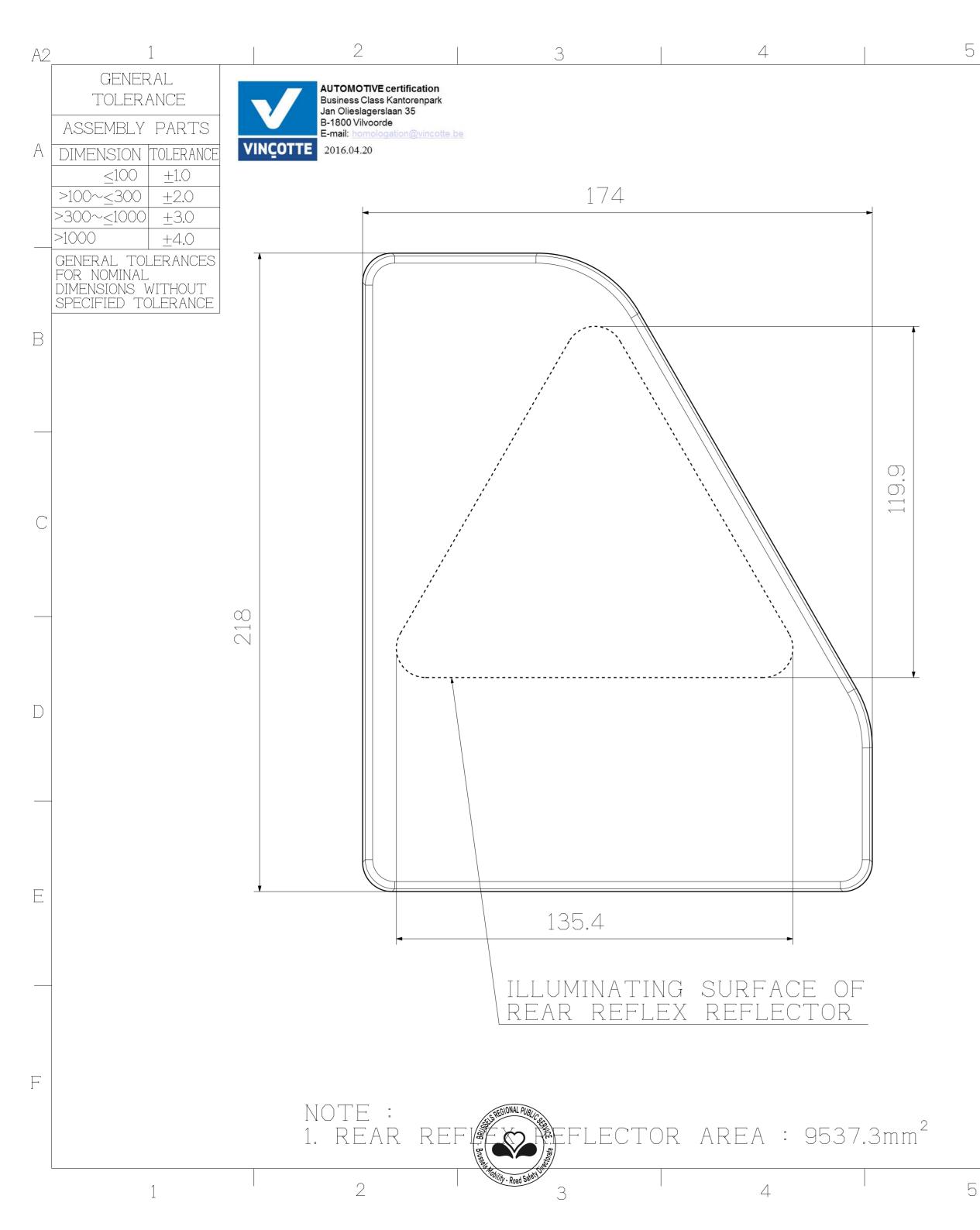
AUTOMOTIVE certification Business Class Kantorenpark Jan Olieslagerslaan 35 B-1800 Vilvoorde E-mail: <u>homologation@vincotte.be</u>

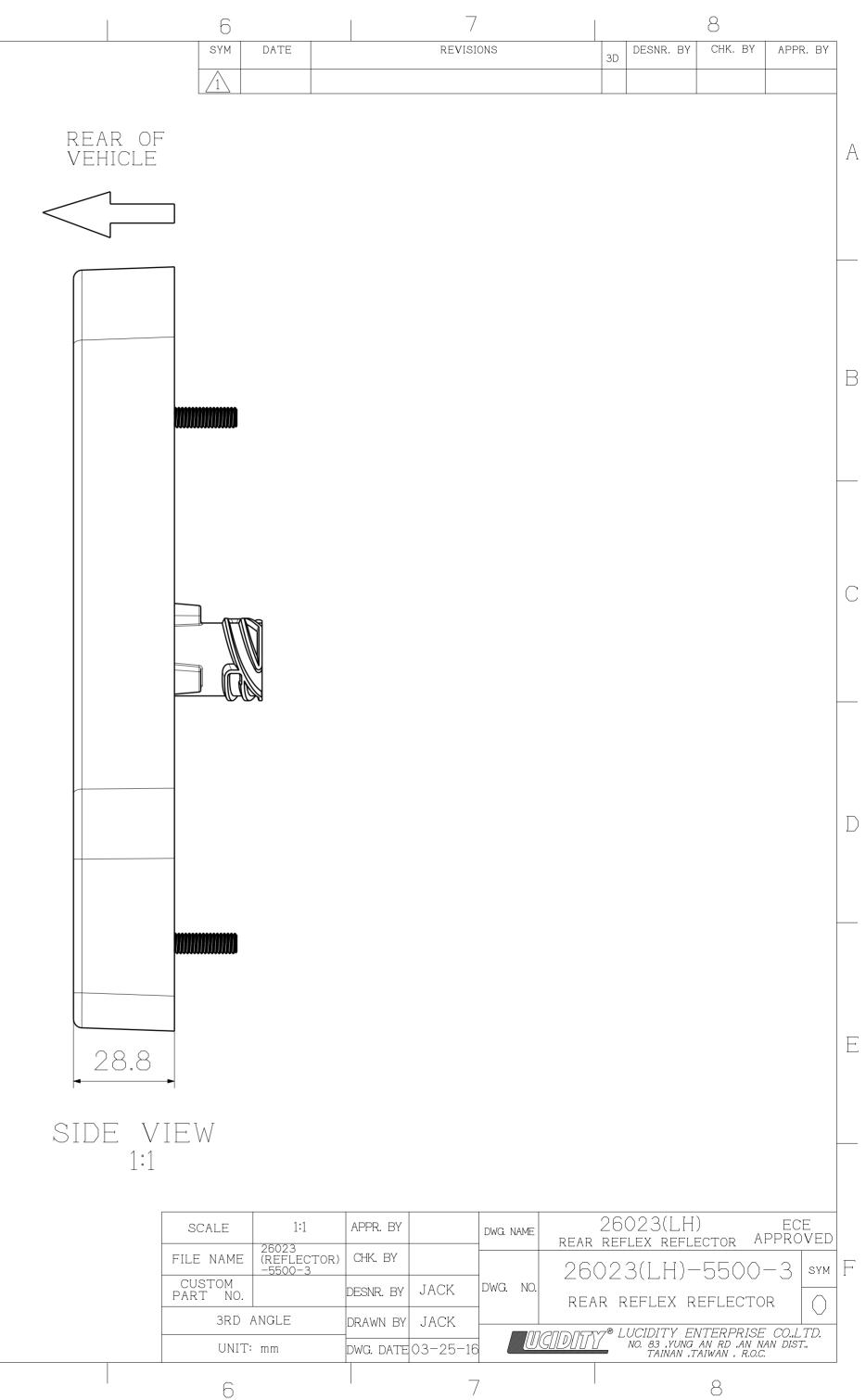


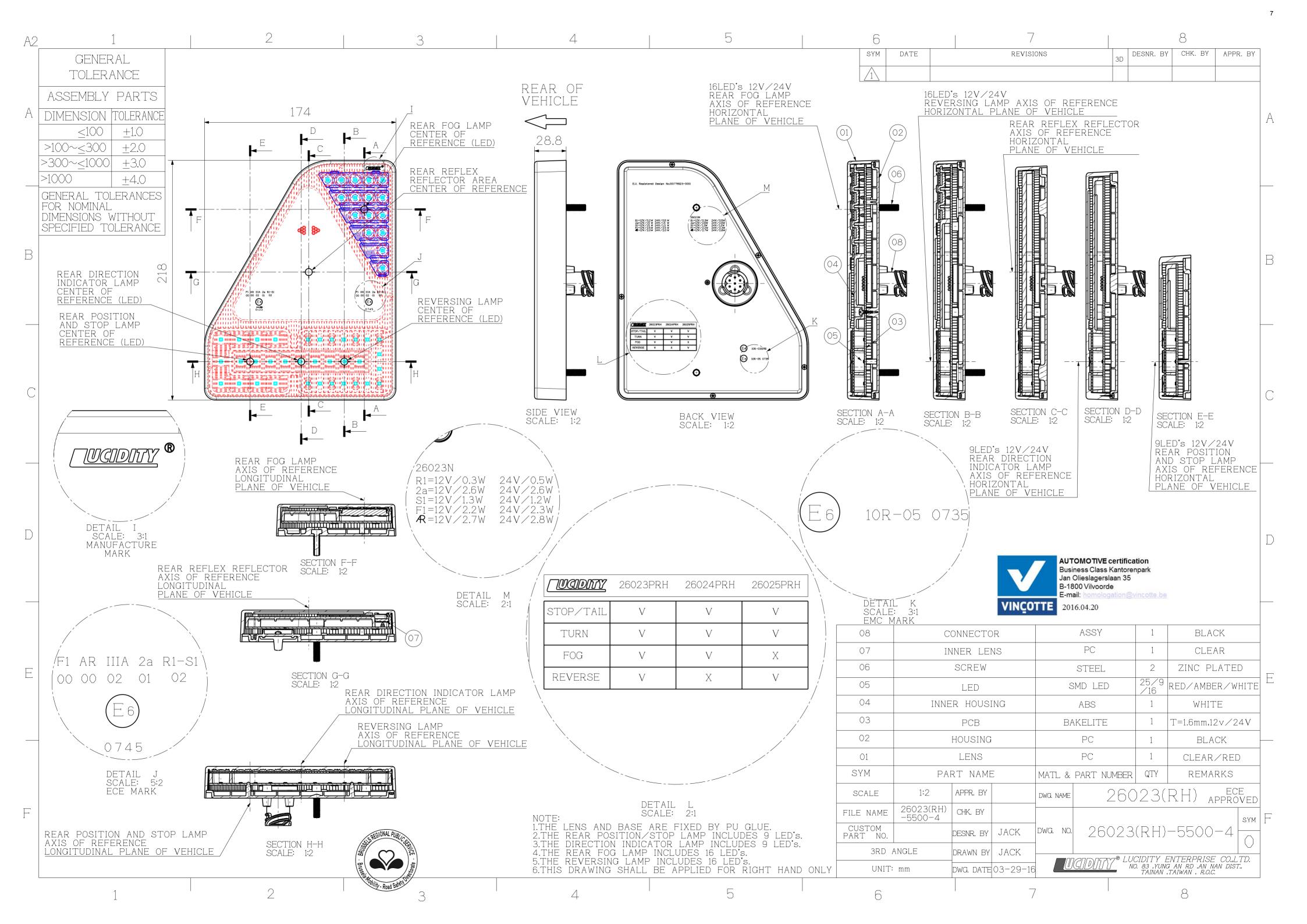


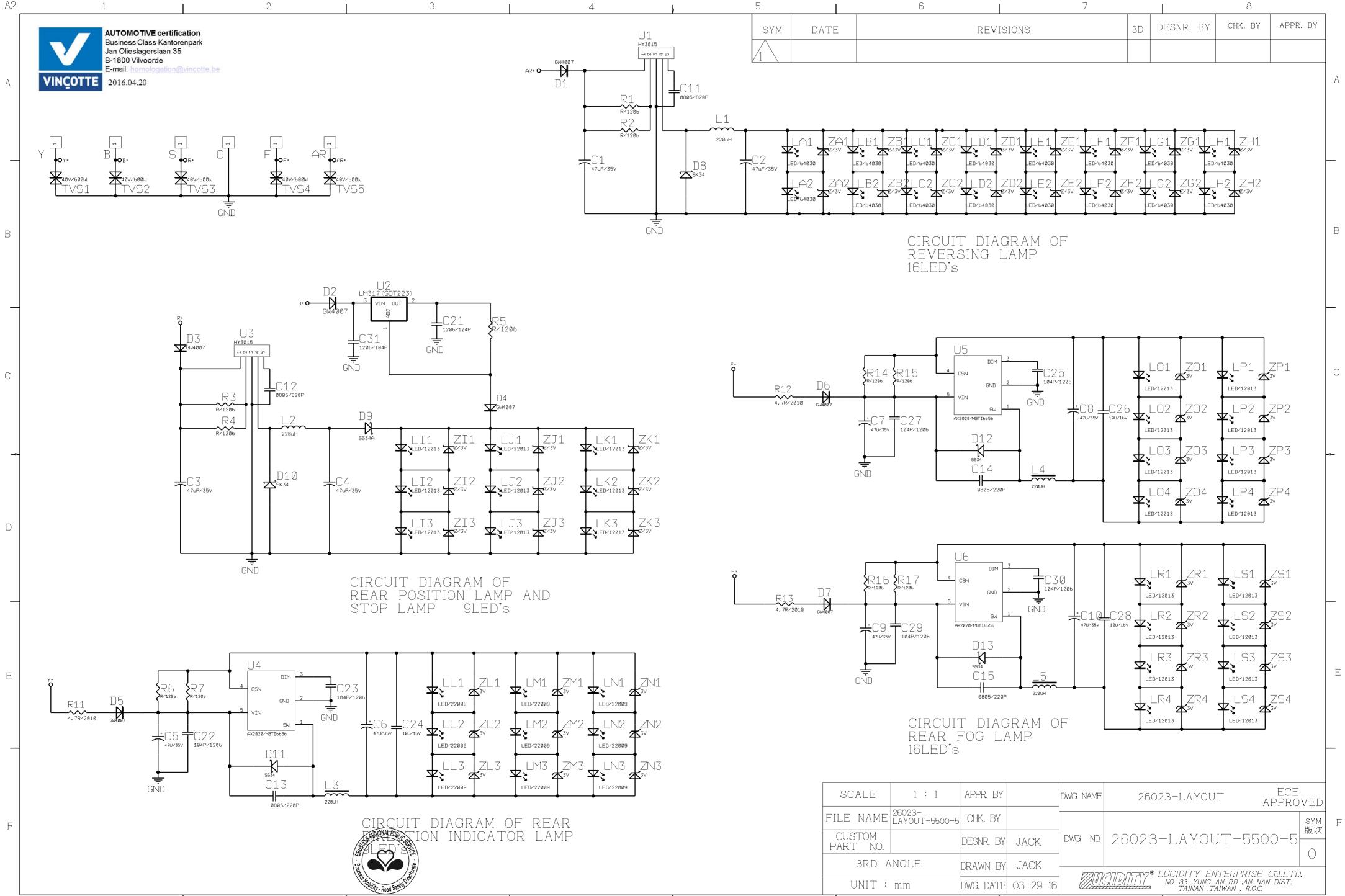


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