

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'amendements applicable <i>Last applicable Series of amendments</i>	N° de la réception de base et mise à jour <i>Base approval and update No</i>	Extension N° <i>Extension No</i>	Révision N° <i>Revision No</i>	Date d'émission <i>Issue date</i>	Fiche de renseignements <i>Information document</i>	
					Référence <i>Reference</i>	Nombre de pages <i>Number of pages</i>
65-00	00	-	-	20.11.2013	JULUEN DIAMONDBACK TA1 / 00	6

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



ir. A. DESCAMPS

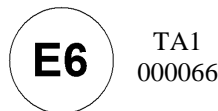
N° d'homologation mis à jour : <i>Updated Approval No</i>	E6-65R-000066	BEVASYS :	201307659
Mise à jour n° : <i>Update No</i>	00	Date d'émission : <i>Issue date</i>	20.11.2013
		P 1	



COMMUNICATION CONCERNANT L'HOMOLOGATION D'UN TYPE DE FEUX-SPÉCIAL D'AVERTISSEMENT
COMMUNICATION CONCERNING THE APPROVAL GRANTED OF A TYPE OF SPECIAL WARNING LAMP
POUR AUTOMOBILES, EN APPLICATION DU RÈGLEMENT No 65-00
FOR MOTOR VEHICLES, PURSUANT TO REGULATION No. 65-00

N° d'homologation : E6-65R-000066
Approval No.

Marque d'homologation :
Approval mark



1. Feu spécial d'avertissement / tournant / à éclat stationnaire / ~~à éclat directionnel rampe complète / de couleur bleue / de couleur jaune-rouge~~¹
*Special warning lamp / rotating / stationary flashing lamp / ~~directional flashing lamp / complete bar / blue / amber / red~~*¹
2. Le feu spécial d'avertissement a un ~~deux~~ niveaux d'intensité¹
*Special warning lamp has one / ~~two~~ levels of intensity*¹
Le feu spécial d'avertissement est composé de ...unités distinctes...
Special warning lamp consists of separate units.
3. Pour les feux spéciaux d'avertissement ayant deux niveaux d'intensité système employé pour obtenir une intensité renforcée de jour : -
For special warning lamps having two levels of intensity, indicate the system used to obtain increased intensity at daytime :
4. Source lumineuse utilisée,
Used light source,
 - ~~Catégorie de lampe à incandescence~~ ou ;
category of filament lamp or ;
 - ~~Source lumineuse à décharge...~~ ou ;
gas discharge light source or ;
 - Source lumineuse à DEL oui / ~~non~~¹ ou ;
LED yes / ~~no~~¹ or ;
24LEDs / 8 light sources
 - Module d'éclairage : ~~oui~~ / non¹
Light source module: yes / no¹
 - Code d'identification spécifique du module d'éclairage : -
Light source module specific identification code:
5. Tension nominale de feu spécial d'avertissement : 12V 36W / 24V 69W
Rated voltage of special warning lamp :
6. Marque ou désignation commerciale : JULUEN
Trade name or mark :

¹ Biffer les mentions qui ne conviennent pas - *Strike out what does not apply*

7. Nom et adresse du fabricant:
7. *Manufacturer's name and address :*
- JULUEN ENTERPRISE CO., LTD.
8F-1, No. 502, Da An Rd. Shulin Dist,
New Taipei City, 238 Taiwan
8. Le cas échéant, nom et adresse du représentant du fabricant : -
8. *If applicable, name and address of manufacturer's representative :*
9. Présenté à l'homologation le: 13.06.2013 ~ 11.11.2013
9. *Submitted for approval on :*
10. Service technique chargé des essais d'homologation:
10. *Technical service responsible for approval tests :*
- AIB VINCOTTE INTERNATIONAL
Jan Olieslagerslaan 35
1800 VILVOORDE
BELGIUM
11. Date du procès-verbal délivré par ce service : 20.11.2013
11. *Date of report issued by that service :*
12. Numéro du procès-verbal délivré par ce service : H1360395647/327
12. *Number of report issued by that service :*
13. L'homologation est accordée / ~~étendue~~¹
13. *Approval granted / ~~extended~~¹*
14. Motif (s) de l'extension (le cas échéant) : -
14. *Reason(s) of extension (if applicable) :*

15. Lieu : Bruxelles
15. *Place*
16. Date : 20.11.2013
16. *Date*
17. Signature :
17. *Signature*

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



ir. A. DESCAMPS

18. On trouvera en annexe à la présente communication, la liste des pièces constituant le dossier d'homologation déposé auprès du Service administratif qui a accordé l'homologation; ces pièces peuvent être obtenues sur demande
18. *The list of documents filed with the Administrative Service which has granted approval and available on request is annexed to this communication.*

**AIB-VINÇOTTE International n.v.**

Head office: Diamant Building – A. Reyerslaan 80 – B-1030 Brussels

Company number : BE 0462.513.222 – HRB : 621315 – Internet : www.vincotte.com Safety, quality and environmental services

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

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: homologation@vincotte.be**1. SUBJECT : SPECIAL WARNING LAMP**

R65-00

2. **REF. :** Report number : **H1360395647/327** No. of pages : 1 of 18 No. of annexes : -
Bevasys : 201307659 Approval No. : (0066 00) Update : 00

3. GENERALITIES :

Make of Device : JULUEN

Commercial Type : -

Manufacturer's Type : DIAMONDBACK TA1 ; DB TA1

Name and address of the manufacturer :

JULUEN ENTERPRISE CO., LTD.

8F-1, No. 502, Da An Rd. Shulin Dist,

New Taipei City, 238 Taiwan

4. **TESTS :** Date and place : 2013.06.13 to 2013.11.11
SUN-JET VISIBLE LIGHT LABORATORY

Applied document(s) : JULUEN DIAMONDBACK TA1 / 00

AVI Inspector : LU WAN-CHING

Persons witnessing the tests : LU WAN-CHING

Location of E-mark : On the lamp

5. CONCLUSIONS :

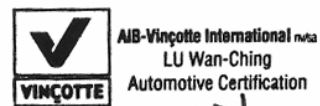
The tests were carried out according to the following specifications :

- UNECE Regulation No. 65 incorporating supplement 7 to the original version.

The models presented comply with the requirements to be applied.

Date : 2013.11.20

Signature :



DESCRIPTION OF THE TESTED HEADLAMP

- Special warning lamp type : ~~rotating~~/stationary flashing lamp/~~directional flashing lamp~~/complete bar*
- Color : ~~blue~~/amber/~~red~~
- Nr of separate units : -
- Light source : LED
- Number of light source(s) : 24LEDs / 8 light sources
- Voltage and wattage : 12V 36W / 24V 69W
- Light source module : ~~Yes~~ / No
- Light source module specific identification code : -

*There are two kinds of outer lens colour, one is clear and another is Amber.

GENERAL SPECIFICATIONS

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
The special warning lamps 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.	5.1.	X	
The special warning lamps must be so designed and constructed that the relevant requirements with regard to voltage higher than 50 V are fulfilled.			
The special warning lamp shall be so designed that after it has been mounted correctly on the vehicle, no maladjustment is possible.	5.2.	X	
The special warning lamp shall be powered directly from the voltage supply network of the vehicle by direct connection or usual connectors (e.g. cigarette lighter plug).	5.2.1.	X	
When a non-replaceable light source is used it shall be permanently fixed to the special warning lamp.	5.3.	X	
Light source module	5.4.		X
The design of the light source module(s) shall be such that even in darkness the light source module(s) can be fitted in no other position, but the correct one.	5.4.1.		
The light source module(s) shall be tamperproof.	5.4.2.		
In the case of a system that uses a special power supply, or a dedicated power supply, or light source control gear shall be part of special warning lamp.	5.5.		X
The frequency f, the "on" time t_H and the "off" time t_D shall correspond to the values indicated in the table in Annex 5 to this Regulation. They shall be measured at an ambient temperature of $+ 23^{\circ} C \pm 5^{\circ} C$ and with voltages at the terminals of the device which are between 90 per cent and 115 per cent of the rated voltage. Moreover, starting and correct functioning of the special warning lamp shall remain assured at temperatures between $- 20^{\circ} C$ and $+ 50^{\circ} C$ or if the special warning lamp is exposed to heavy rain, in accordance with the procedure described in Annex 4 to this Regulation. Under those conditions, one minute after a voltage equal to 90 per cent of the rated voltage has been applied, the frequency shall remain between 2 and 4 Hz.	5.6.	X	

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
A rotating or flashing special warning lamp device of Category T may consist of more than one optical system. In this case the requirements of Annex 5 § 8 must be met. The lamp manufacturer must supply mounting information to ensure that the various units are correctly mounted on a vehicle.	5.7.		X

PHOTOMETRIC SPECIFICATIONS

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
The special warning lamps shall comply with the conditions prescribed in Annex 5 to this Regulation.	6.	X	

CHECKING THE COLOUR OF THE SPECIAL WARNING LAMP

Characteristics concerned and prescriptions to apply	References	Conformity	Not applicated
<p>The colour shall comply with the colorimetric boundaries prescribed in Annex 3 to this Regulation.</p> <p>The colorimetric characteristics of the light emitted, expressed in CIE chromaticity co-ordinates, shall be evaluated using the light source as designed, working at the voltage as specified in § 4.2. in Annex 5 of this Regulation.</p> <p>In case of a special warning lamp employing a Xenon flash tube, as an alternative the chromaticity co-ordinates may be deduced from the spectral distribution of the transmission of the cover and the transmission or reflection of any other optical effective elements which could impair the colour of the special warning lamp. The calculation then shall be based on a luminous source with a relative spectral distribution as listed in Annex 6.</p>		X	

TRICHROMATIC CO-ORDINATES FOR THE LIGHT EMITTED THROUGH THE AMBER OR BLUE FILTERS CONSTITUTING THE COVERS OF SPECIAL WARNING LAMPS (ANNEX 3)

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
<p>Under the conditions of § 7 of this Regulation, the trichromatic co-ordinates of light emitted through the filters used for special warning lamps shall lie within the following boundaries:</p> <p>1. Amber ¹</p> <p> limit towards green : $y \leq x - 0.120$</p> <p> limit towards red : $y \geq 0.390$</p> <p> limit towards white : $y \geq 0.790 - 0.670 x$</p> <p>2. Blue</p> <p> limit towards green : $y = 0.065 + 0.805 x$</p> <p> limit towards white : $y = 0.400 - x$</p> <p> limit towards purple : $y = 1.67x - 0.222$</p> <p>3. Red</p> <p> limit towards purple : $y \geq 0.980 - x$</p> <p> limit towards yellow : $y \leq 0.335$</p>		<p style="text-align: center;">X</p>	<p style="text-align: center;">X</p> <p style="text-align: center;">X</p>

¹ Corresponds to a specific part of the "yellow" zone of the triangle of CIE colours.

PROCEDURE FOR THE RAIN TEST (ANNEX 4)

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
<p>A sample of the special warning lamp, fitted in its normal operating position, with all the drainage apertures open if they exist, shall be subjected to a precipitation of 2.5 mm of water per minute, the water being directed at an angle of 45° and from a nozzle producing a full conical jet.</p> <p>During the test, the device shall turn on its vertical axis at a rate of 4 turns per minute.</p> <p>The test shall last for 12 hours continuously after which the water jet shall be stopped.</p> <p>One hour later, the sample shall be examined and shall be regarded as having passed the test if the accumulated volume of water does not exceed 2 cm³.</p>		X	

PHOTOMETRIC SPECIFICATIONS (ANNEX 5)

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
<p>Measurements of the photometric characteristics shall be taken at a distance of at least 25 m.</p> <p>The angular diameter of the photoelectric receiver as seen from the special warning lamp shall be 10 minutes or arc maximum.</p> <p>The response time of the photometric system shall be adequate to the rising time of the signal to be measured.</p>	1.	X	
<p>For special warning lamps having one level of intensity (class1), the "by night" level shall apply.</p> <p>For special warning lamps having two levels of intensity (class 2), measurements shall be carried out for each of the two levels.</p> <p>The effective luminous intensities in various directions shall be as specified in the table below.</p>	2.	X	

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
<p>If a filament lamp is used that shall be a standard filament lamp as provided for in Regulation No. 37 corresponding to a lamp of the category specified for the special warning lamp.</p>	3.		X
<p>Light source conditions for test:</p>	4.		
<p>In the case of replaceable light sources a standard lamp shall be used.</p>	4.1.		X
<p>All measurements on lamps equipped with replaceable or non-replaceable light sources (filament lamps, gas discharge light sources and other) shall be made at 6.75 V, 13.5 V or 28.0 V, respectively.</p>	4.2.	X	
<p>In the case of a system that uses a special power supply, or a dedicated power supply, or light source control gear, the voltage declared by the manufacturer shall be applied to the input terminals of that power supply. Unless otherwise specified 6.75 V, 13.5 V or 28 V, as applicable shall be used.</p>			
<p>In the case of filament lamps it is allowed to make the measurements with a standard filament lamp at reference flux conditions nearly at 12 V and recalculate the measured values by a factor, which is determined with this standard filament lamp at 13.5 Volt, if applicable.</p>	4.3.		X
<p>For any lamp equipped with non-filament light source(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 by applying the ratio achieved at HV between one minute and 30 minutes of operation.</p>	5.	X	
<p>If the emitted light of a special warning lamp consists of groups of several flashes, the time distance Δt between the immediately following flashes must be very short.</p>	6.	X	
<p>If the peak to peak distance Δt is less or equal to 0.04 s, then the pulses in between are evaluated as one flash. If this distance Δt is longer only the flash with the highest effective intensity is valid. Moreover, the period is limited depending on the ratio between the effective intensities of the flashes within a group (IH= max. effective intensity of the highest peak, IL = max. effective intensity of the lowest peak) as follows:</p>			
<p>in case Error! Bookmark not defined.</p>			
$\frac{I_H}{I_L} > 10 \text{ then } \Delta_t (s) < \frac{1}{3f}$			
<p>in case</p>			
$1 < \frac{I_H}{I_L} < 10 \text{ then } \Delta_t (s) < \frac{1}{f(5.50 - 0.25 \frac{I_H}{I_L})}$			

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
<p>Frequency, time, and intensity of the emitted light</p> <p>The frequency, the "ON" time and the "OFF" time shall be as specified in the table shown in §7.1</p> <p>The effective luminous intensities (J_e) within the relevant vertical angles for a special warning lamp (Category T) shall be as specified in the table shown in §7.2.</p> <p>In the case of a special warning lamp device which is comprised of more than one separate unit, the geometrical arrangement(s) as installed at the vehicle seems to be acceptable, if the partial light distribution of each single separate unit is overlapping with each adjacent partial light distribution inside a horizontal angular range of 360° and in a vertical angular range as specified for the relevant category in a geometrical position corresponding to a distance of 20 m, from the vehicle on a vertical plane that is perpendicular to the longitudinal axis of the vehicle and located midway between the lamp units on a side of the vehicle.</p> <p>The effective luminous intensities in the reference axis for a directional flashing lamp (Category X) shall be as specified in the table shown in §7.3.</p> <p>Table of standard light distribution for special warning flash lamp (Category X)</p> <p>Minimum horizontal angular range of category "narrow angle effect" is 30° left to 30° right and for category "wide angle effect" 90° directed outwards the vehicle and 30° to the inside.</p> <p>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 table give, for the various directions of measurements, the minimum intensities as a percentage of the minimum required in the axis for each lamp (in the direction $H = 0^\circ$ and $V = 0^\circ$).</p> <p>Within the field of light distribution of § 7.3.1. schematically shown as a grid, the light pattern should be substantially uniform, i.e. the light intensity in each direction of lowest minimum value being shown on the grid lines surrounding the questioned direction as a percentage.</p> <p>In the case of a special warning lamp device of Category X which comprises of more than one separate unit, the geometrical arrangement(s) as installed on the vehicle, is(are) acceptable when the partial light distribution of each single separate unit is overlapping with each adjacent partial light distribution inside the horizontal and vertical angular range specified for the Category X.</p>	<p>7.</p> <p>7.1</p> <p>7.2.</p> <p>7.2.1.</p> <p>7.3.</p> <p>7.3.1.</p> <p>7.3.1.1.</p> <p>7.3.1.2.</p> <p>7.3.2.</p>	<p></p> <p>X</p> <p>X</p> <p>X</p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p>	<p></p> <p></p> <p></p> <p></p> <p>X</p> <p></p> <p></p> <p></p>

Characteristics concerned and prescriptions to apply	References	Conformity	Not applied
<p>If two or more optical systems are integrated in one special warning lamp, this unit has to comply with the following requirements:</p> <p>Each optical system shall be in accordance with the requirements of this Annex within the horizontal angle which is not covered by one of the other optical systems. Furthermore, in each required direction at least one optical system shall be effective corresponding to the requirements of this Annex.</p> <p>If a special warning lamp contains two or more optical systems, all the optical systems shall work in phase. This applies only to each half of a complete "bar" which is designed to extend on the width of the vehicle.</p> <p>As long as the efficiency of the special warning lamp is to be secured all around the car a detection of the failure of a part of a special warning system shall exist on the car. If it is designed by the special warning lamp manufacturer this detection shall be checked during the approval procedure.</p>	<p>8.</p> <p>8.1.</p> <p>8.2.</p> <p>8.3.</p>		X

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).

Equipment Description	Model Number
SJTC-O-001 Goniophotometer	OPTRONIK SMS 10c
SJTC-O-016 Flash meter	Czibula & Grundmann GmbH Ph-St-B8-Th-Fast
SJTC-O-017 High-Speed Multi Channel Spectrophoto Meter	OTSUKA MCPD-9800(2480)
SJTC-O-011 Power Supply	OPTRONIK SNT10
SJTC-O-021 Oscilloscope	TEKTRONIX DPO3012
SJTC-M-005 Aging Oven Tester	GOLDEN TOP
SJTC-M-013 Rain Tester	GIANT FORCE GSRT-1728-A
SJTC-M-015 Temperature & Humidity Tester	GIANT FORCE
Rain Test	TESTING BY JULUEN ENTERPRISE CO., LTD.

TEST RESULTS : For Special Warning Lamp with Clear Outer Lens on By Night Level

Light sources : 24 LEDs / 8 light sources ; Rated voltage and wattage : 12V 36W / 24V 69W

Specification : Measure the effective luminous intensity J_e , locating minimum and maximum value along horizontal plane, 10 degree increments.

Test Results of Photometric Measurement and Flash Characteristics Measurement

Lamp Function	: Amber Special Warning Lamp	Test Voltage	: 13.5V / 28V
Category&Class	: TA1	Test Distance	: 25 m
Requirement	: ECE Reg. 65 Annex 5		
By Day / By Night	: By Night	“ON” time t_H	: 0.1938 s / 0.1925 s
Frequency (f)	: 2.04 Hz / 2.06 Hz	“OFF” time t_D	: 0.2960 s / 0.2934 s
Flash Mode	: Double Flash	Δt	: 0.0300 s / 0.0300 s

Point on Measuring Screen	Requirement (cd)		Measurement (cd)					
	Min	Max	Sample 1 (12V)			Sample 2 (24V)		
			1 Minute	30 Minutes	Remark	1 Minute	30 Minutes	Remark
H - 180R(L)	100	700	362.4	332.2		379.6	359.8	
H - 170R	100	700	353.9	324.4		375.2	355.6	
H - 160R	100	700	310.2	284.3		352.1	333.7	
H - 150R	100	700	256.9	235.5		288.5	273.4	
H - 140R	100	700	252.2	231.1		278.1	263.6	
H - 130R	100	700	238.9	219.0		263.4	249.6	
H - 120R	100	700	213.8	196.0		223.6	211.9	
H - 110R	100	700	233.5	214.0		191.8	181.8	
H - 100R	100	700	182.5	167.3		159.1	150.8	
H - 90R	100	700	224.2	205.5		216.8	205.5	
H - 80R	100	700	192.0	176.0		160.0	151.7	
H - 70R	100	700	191.2	175.3		181.9	172.4	
H - 60R	100	700	257.5	236.0		220.2	208.7	
H - 50R	100	700	273.0	250.3		262.5	248.8	
H - 40R	100	700	267.2	244.9		273.9	259.6	
H - 30R	100	700	280.1	256.8		287.7	272.6	
H - 20R	100	700	362.1	331.9		359.8	341.0	
H - 10R	100	700	385.4	353.3		379.9	360.1	
H - V	100	700	389.9	357.2	Max. J_e	383.4	363.4	Max. J_e
H - 10L	100	700	375.7	344.4		376.1	356.4	
H - 20L	100	700	325.8	298.7		350.4	332.1	
H - 30L	100	700	269.1	246.7		287.3	272.3	
H - 40L	100	700	261.2	239.4		277.3	262.8	
H - 50L	100	700	248.3	227.6		260.3	246.7	
H - 60L	100	700	214.0	196.1		213.6	202.5	
H - 70L	100	700	225.2	206.4		189.2	179.3	
H - 80L	100	700	193.5	177.3		165.7	157.0	
H - 90L	100	700	215.8	197.8		227.8	215.9	
H - 100L	100	700	176.9	162.1		158.1	149.9	Min. J_e
H - 110L	100	700	190.3	174.4	Min. J_e	182.2	172.7	
H - 120L	100	700	260.3	238.6		218.6	207.2	
H - 130L	100	700	270.3	247.7		266.4	252.5	
H - 140L	100	700	260.1	238.4		274.7	260.4	
H - 150L	100	700	268.3	245.9		291.5	276.3	
H - 160L	100	700	340.1	311.7		357.6	338.9	
H - 170L	100	700	360.7	330.6		376.3	356.6	

Test Results

Passed

Failed

Test Results of Photometric and Flash Characteristics Measurement

Lamp Function	: Amber Special Warning Lamp	Test Voltage	: 13.5V / 28 V
Category&Class	: TA1	Test Distance	: 25 m
Requirement	: ECE Reg. 65 Annex 5 and Annex 3		
By Day / By Night	: By Night	“ON” time t_H	: 0.1938 s / 0.1925 s
Frequency (f)	: 2.04 Hz / 2.06 Hz	“OFF” time t_D	: 0.2960 s / 0.2934 s
Flash Mode	: Double Flash	Δt	: 0.0300 s / 0.0300 s

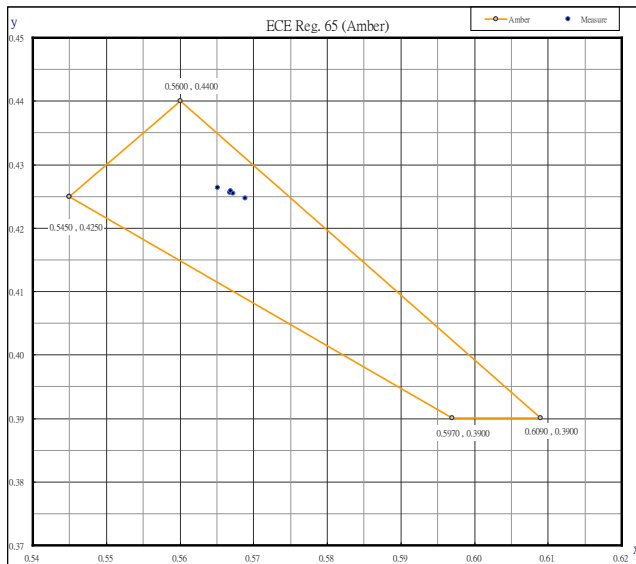
Point on Measuring Screen	Requirement (cd)		Sample 1 (12V) Je Measurement (cd)			
	Min	Max	Locating Max. Je		Locating Min. Je	
			1 Minute	30 Minutes	1 Minute	30 Minutes
8U - 0	70	600	236.0	216.3	-	-
2U - 0	-	700	384.3	352.3	-	-
H - 0	100	700	389.7	357.2	-	-
2D - 0	-	700	347.7	318.7	-	-
8D - 0	70	600	231.4	212.1	-	-
Outside the above areas	-	300	203.2	186.3	-	-
8U - 110L	70	600	-	-	115.3	105.7
2U - 110L	-	700	-	-	191.4	175.5
H - 110L	100	700	-	-	190.3	174.4
2D - 110L	-	700	-	-	178.5	163.7
8D - 110L	70	600	-	-	115.4	105.7
Outside the above areas	-	300	-	-	106.1	97.2
Point on Measuring Screen	Requirement (cd)		Sample 2 (24V) Je Measurement (cd)			
	Min	Max	Locating Max. Je		Locating Min. Je	
			1 Minute	30 Minutes	1 Minute	30 Minutes
8U - 0	70	600	308.8	292.6	-	-
2U - 0	-	700	373.9	354.4	-	-
H - 0	100	700	383.4	363.4	-	-
2D - 0	-	700	376.1	356.5	-	-
8D - 0	70	600	311.8	295.5	-	-
Outside the above areas	-	300	204.5	193.8	-	-
8U - 100L	70	600	-	-	140.0	132.7
2U - 100L	-	700	-	-	164.5	155.9
H - 100L	100	700	-	-	158.1	149.9
2D - 100L	-	700	-	-	159.6	151.3
8D - 100L	70	600	-	-	138.4	131.2
Outside the above areas	-	300	-	-	98.1	93.0
Test Results	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Failed			

Test Results of Colour Measurement

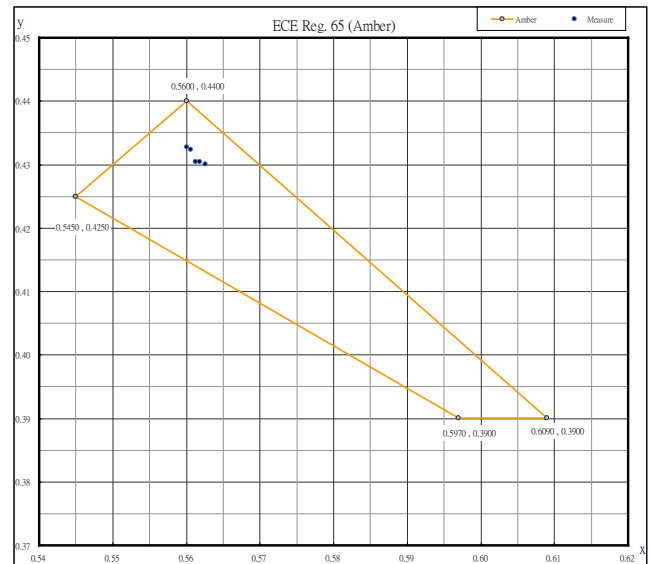
Light Emitted Color : Amber
 By Day / By Night : By Night
 Color Boundaries - Limit towards green : $y \leq x - 0.120$
 - Limit towards red : $y \geq 0.390$
 - Limit towards white : $y \geq 0.790 - 0.670 x$

Test Points	By Night, Measurement (x ,y)	
	Sample 1 (12V)	Sample 2 (24V)
Point 1	(0.5672, 0.4254)	(0.5618, 0.4304)
Point 2	(0.5668, 0.4256)	(0.5606, 0.4324)
Point 3	(0.5651, 0.4264)	(0.5626, 0.4301)
Point 4	(0.5669, 0.4258)	(0.5613, 0.4304)
Point 5	(0.5689, 0.4247)	(0.5601, 0.4328)
Test Results	<input checked="" type="checkbox"/> Passed	<input type="checkbox"/> Failed

By Night (12V)- chart



By Night (24V)- chart



Test Results of Temperature Measurement

Lamp Function : Amber Special Warning Lamp

Requirement : ECE Reg. 65 Para 5.6

Test Requirement : The special warning lamp shall remain assured at temperatures between - 20 °C and + 50 °C. Under the condition, one minute after a voltage equal to 90 percent of the rated voltage has been applied, the frequency shall remain between 2 and 4 Hz.

Flash frequency measurement within temperature test :

Test Sample	Temperature (°C)	Requirement (Hz)	Measurement (Hz)
			By Night
Sample 1	-20	2.0 ~ 4.0	2.03
	50		2.04
Test Results	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Failed

Test Results of Rain Test

Lamp Function : Amber Special Warning Lamp

Requirement : ECE Reg. 65 Annex 4

Visible Inspection : Upon completion of the drain one hour later, the accumulated volume of water does not exceed 2 cm³.

Flash frequency measurement within rain test :

Test Sample	Requirement (Hz)		Measurement (Hz)
	Min	Max	By Night
Sample 5	2.0	4.0	2.04
Test Results	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Failed

TEST RESULTS : For Special Warning Lamp with Amber Outer Lens on By Night Level

Light sources : 24 LEDs / 8 light sources ; Rated voltage and wattage : 12V 36W / 24V 69W

Specification : Measure the effective luminous intensity J_e , locating minimum and maximum value along horizontal plane, 10 degree increments.

Test Results of Photometric Measurement and Flash Characteristics Measurement

Lamp Function	: Amber Special Warning Lamp	Test Voltage	: 13.5V / 28V
Category&Class	: TA1	Test Distance	: 25 m
Requirement	: ECE Reg. 65 Annex 5		
By Day / By Night	: By Night	“ON” time t_H	: 0.1930 s / 0.1941 s
Frequency (f)	: 2.04 Hz / 2.04 Hz	“OFF” time t_D	: 0.2957 s / 0.2958 s
Flash Mode	: Double Flash	Δt	: 0.0300 s / 0.0300 s

Point on Measuring Screen	Requirement (cd)		Measurement (cd)					
	Min	Max	Sample 3 (12V)			Sample 4 (24V)		
			1 Minute	30 Minutes	Remark	1 Minute	30 Minutes	Remark
H - 180R(L)	100	700	350.5	335.2	Max. J_e	360.8	342.9	
H - 170R	100	700	346.6	331.4		352.5	335.1	
H - 160R	100	700	328.6	314.2		319.0	303.2	
H - 150R	100	700	271.1	259.2		274.1	260.6	
H - 140R	100	700	265.4	253.8		269.4	256.1	
H - 130R	100	700	250.8	239.8		248.5	236.2	
H - 120R	100	700	209.2	200.0		217.8	207.0	
H - 110R	100	700	184.2	176.1		236.5	224.7	
H - 100R	100	700	157.1	150.3		191.9	182.4	
H - 90R	100	700	209.8	200.6		213.8	203.2	
H - 80R	100	700	158.4	151.4		174.0	165.4	Min. J_e
H - 70R	100	700	179.3	171.5		185.8	176.6	
H - 60R	100	700	217.7	208.2		243.0	230.9	
H - 50R	100	700	258.6	247.3		279.5	265.6	
H - 40R	100	700	263.4	251.8		267.3	254.1	
H - 30R	100	700	272.0	260.1		283.2	269.1	
H - 20R	100	700	331.7	317.2		351.7	334.3	
H - 10R	100	700	344.0	328.9		365.1	347.0	Max. J_e
H - V	100	700	343.9	328.8		363.9	345.8	
H - 10L	100	700	334.7	320.1		353.8	336.2	
H - 20L	100	700	310.9	297.3		317.6	301.9	
H - 30L	100	700	256.1	244.9		280.2	266.3	
H - 40L	100	700	244.6	233.9		273.1	259.6	
H - 50L	100	700	231.9	221.8		252.0	239.5	
H - 60L	100	700	199.0	190.3		214.8	204.2	
H - 70L	100	700	169.4	162.0		239.7	227.8	
H - 80L	100	700	144.5	138.1	Min. J_e	184.3	175.2	
H - 90L	100	700	198.7	190.1		212.7	202.1	
H - 100L	100	700	159.6	152.6		188.6	179.2	
H - 110L	100	700	178.2	170.4		189.4	180.0	
H - 120L	100	700	212.7	203.4		256.9	244.1	
H - 130L	100	700	249.3	238.4		284.8	270.6	
H - 140L	100	700	260.6	249.2		260.8	247.9	
H - 150L	100	700	271.3	259.4		278.4	264.6	
H - 160L	100	700	330.1	315.6		346.4	329.2	
H - 170L	100	700	347.3	332.1		359.0	341.2	

Test Results

Passed

Failed

Test Results of Photometric and Flash Characteristics Measurement

Lamp Function : Amber Special Warning Lamp Test Voltage : 13.5V / 28 V
 Category&Class : TA1 Test Distance : 25 m
 Requirement : ECE Reg. 65 Annex 5 and Annex 3

By Day / By Night : By Night "ON" time t_H : 0.1930 s / 0.1941 s
 Frequency (f) : 2.04 Hz / 2.04 Hz "OFF" time t_D : 0.2957 s / 0.2958 s
 Flash Mode : Double Flash Δt : 0.0300 s / 0.0300 s

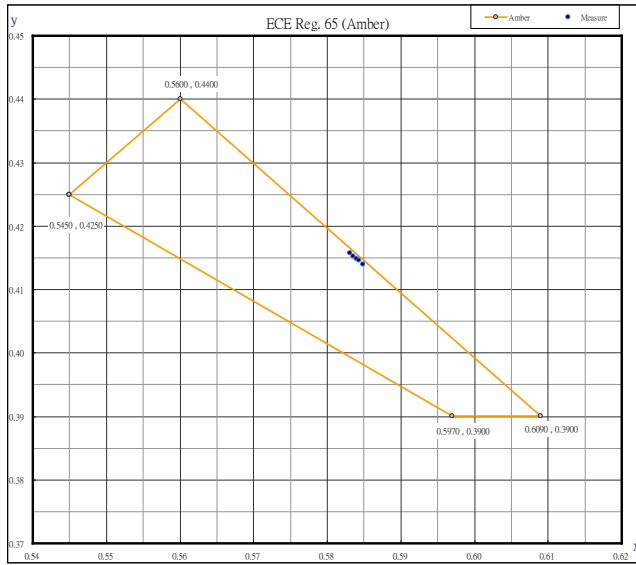
Point on Measuring Screen	Requirement (cd)		Sample 3 (12V) Je Measurement (cd)			
	Min	Max	Locating Max. Je		Locating Min. Je	
			1 Minute	30 Minutes	1 Minute	30 Minutes
8U - 180R(L)	70	600	286.1	273.5	-	-
2U - 180R(L)	-	700	350.3	335.0	-	-
H - 180R(L)	100	700	347.7	332.5	-	-
2D - 180R(L)	-	700	345.0	329.9	-	-
8D - 180R(L)	70	600	283.5	271.1	-	-
Outside the above areas	-	300	194.3	185.8	-	-
8U - 80L	70	600	-	-	127.2	121.6
2U - 80L	-	700	-	-	143.2	136.9
H - 80L	100	700	-	-	144.5	138.2
2D - 80L	-	700	-	-	152.4	145.8
8D - 80L	70	600	-	-	124.8	119.3
Outside the above areas	-	300	-	-	103.6	99.0
Point on Measuring Screen	Requirement (cd)		Sample 4 (24V) Je Measurement (cd)			
	Min	Max	Locating Max. Je		Locating Min. Je	
			1 Minute	30 Minutes	1 Minute	30 Minutes
8U - 10R	70	600	294.6	280.0	-	-
2U - 10R	-	700	353.5	336.0	-	-
H - 10R	100	700	365.1	347.0	-	-
2D - 10R	-	700	356.0	338.4	-	-
8D - 10R	70	600	298.9	284.1	-	-
Outside the above areas	-	300	192.5	183.0	-	-
8U - 80R	70	600	-	-	146.3	139.0
2U - 80R	-	700	-	-	172.7	164.2
H - 80R	100	700	-	-	174.0	165.4
2D - 80R	-	700	-	-	174.3	165.7
8D - 80R	70	600	-	-	146.8	139.5
Outside the above areas	-	300	-	-	108.7	103.4
Test Results	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Failed			

Test Results of Colour Measurement

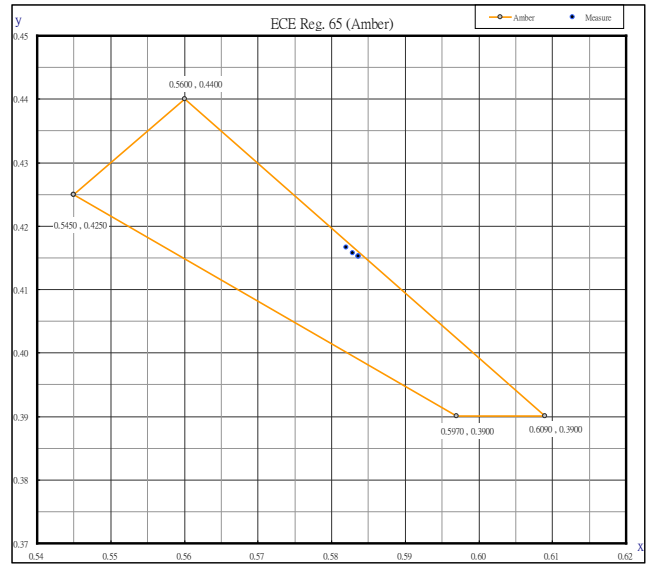
Light Emitted Color : Amber
 By Day / By Night : By Night
 Color Boundaries - Limit towards green : $y \leq x - 0.120$
 - Limit towards red : $y \geq 0.390$
 - Limit towards white : $y \geq 0.790 - 0.670 x$

Test Points	By Night, Measurement (x ,y)	
	Sample 1 (12V)	Sample 2 (24V)
Point 1	(0.5840, 0.4149)	(0.5836, 0.4152)
Point 2	(0.5849, 0.4140)	(0.5836, 0.4152)
Point 3	(0.5831, 0.4157)	(0.5820, 0.4166)
Point 4	(0.5843, 0.4146)	(0.5829, 0.4157)
Point 5	(0.5835, 0.4152)	(0.5836, 0.4152)
Test Results	<input checked="" type="checkbox"/> Passed	<input type="checkbox"/> Failed

By Night (12V)- chart



By Night (24V)- chart



Test Results of Temperature Measurement

Lamp Function : Amber Special Warning Lamp

Requirement : ECE Reg. 65 Para 5.6

Test Requirement : The special warning lamp shall remain assured at temperatures between - 20 °C and + 50 °C. Under the condition, one minute after a voltage equal to 90 percent of the rated voltage has been applied, the frequency shall remain between 2 and 4 Hz.

Flash frequency measurement within temperature test :

Test Sample	Temperature (°C)	Requirement (Hz)	Measurement (Hz)
			By Night
Sample 3	-20	2.0 ~ 4.0	2.04
	50		2.04
Test Results	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Failed

Test Results of Rain Test

Lamp Function : Amber Special Warning Lamp

Requirement : ECE Reg. 65 Annex 4

Visible Inspection : Upon completion of the drain one hour later, the accumulated volume of water does not exceed 2 cm³.

Flash frequency measurement within rain test :

Test Sample	Requirement (Hz)		Measurement (Hz)
	Min	Max	By Night
Sample 6	2.0	4.0	2.04
Test Results	<input checked="" type="checkbox"/> Passed		<input type="checkbox"/> Failed

ECE INFORMATION DOCUMENT REF: JULUEN DIAMONDBACK TA1 / 00

JULUEN ENTERPRISE CO., LTD.
8F-1, No. 502, Da An Rd. Shulin Dist,
New Taipei City, 238 Taiwan

SPECIAL WARNING LAMP

JULUEN DIAMONDBACK TA1 ; DB TA1

Application: original
Date: July 08, 2013

Total number of pages: 6



AUTOMOTIVE certification
Business Class Kantorenpark
Jan Olieslagerslaan 35
B-1800 Vilvoorde
E-mail: homologation@vincotte.be
2013.11.20

DRAWING REF: -- JULUEN DIAMONDBACK TA1 / 00 -- dated 2013.07.08

ECE INFORMATION DOCUMENT REF: JULUEN DIAMONDBACK TA1 / 00

Manufacturer name and address: JULUEN ENTERPRISE CO., LTD.
8F-1, No. 502, Da An Rd. Shulin Dist,
New Taipei City, 238 Taiwan

Trade name or mark : JULUEN

Type of device : DIAMONDBACK TA1; DB TA1

SPECIFICATIONS

Function-Application-class category lamp and colour



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 2013.11.20

Trade name or mark		JULUEN
Function		<i>Special warning lamp</i>
ECE Regulation		65-00 Supplement 7
Levels of intensity (Class)		Class 1
Used intensity system	by day	N.A.
	by night	Normal system
Category		Directional / Rotating / Stationary flashing
Number, category and kind of light source(s)		24 LEDs / 8 light sources
Voltage and wattage		12V 36W / 24V 69W
Lens	Outer	Clear / Amber ⁽¹⁾
	Filter (Inner)	Clear
Colour of light emitted		AMBER / RED / BLUE

⁽¹⁾There are two kinds of outer lens colour, one is clear and another is Amber.

TECHNICAL DATA

Part		Material	Remark
Lens	Outer	PC (polycarbonate)	Sabic ⁽²⁾
	Filter (Inner)	PC (polycarbonate)	Sabic ⁽²⁾
Reflector		-	-
Housing		PC + ALUMINUM	-

⁽²⁾The base material of lens: Type number is LEXAN LS2 from Sabic Innovative Plastics.

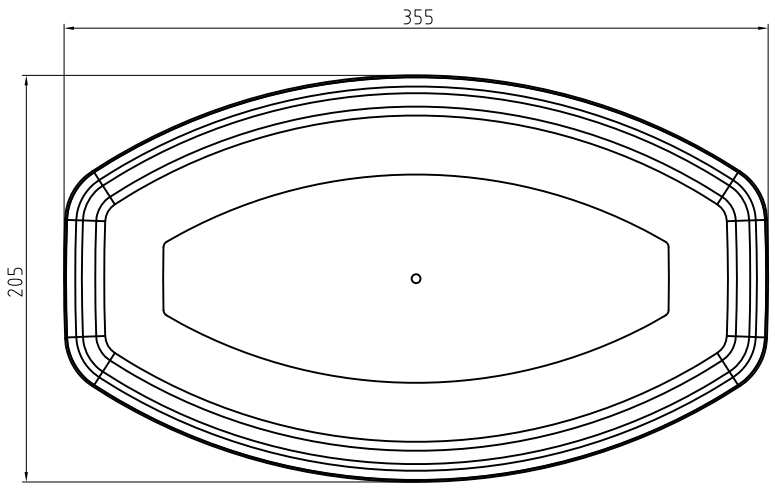
MARKING

Marking		Location
Trade name or mark	JULUEN	See drawing
Approval marks	0066	See drawing

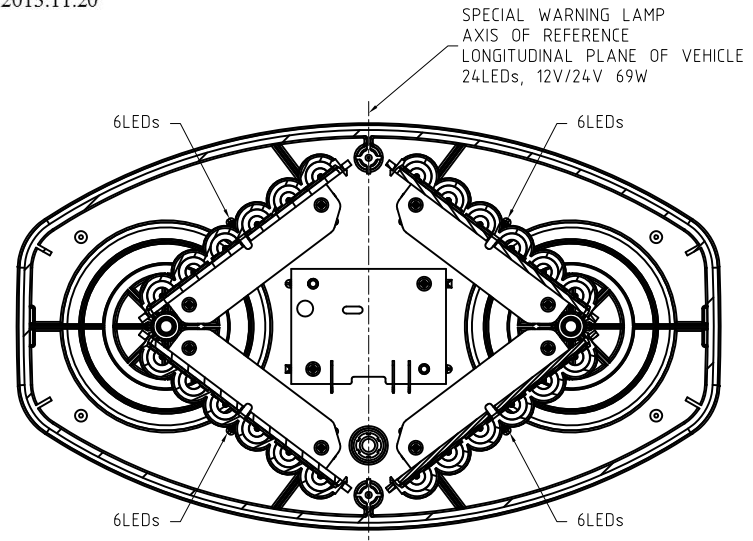
DRAWING REF: -- JULUEN DIAMONDBACK TA1 / 00 -- dated 2013.07.08



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 2013.11.20

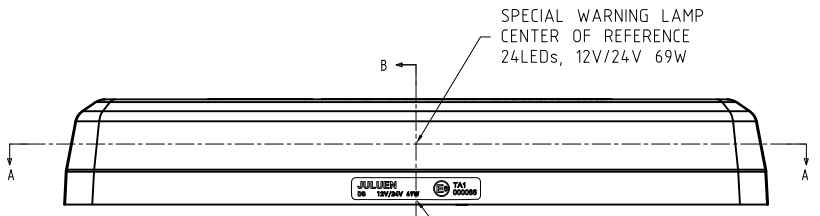


TOP VIEW



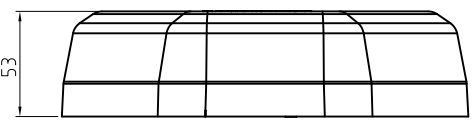
SECTION A-A

SPECIAL WARNING LAMP
 AXIS OF REFERENCE
 LONGITUDINAL PLANE OF VEHICLE
 24LEDs, 12V/24V 69W

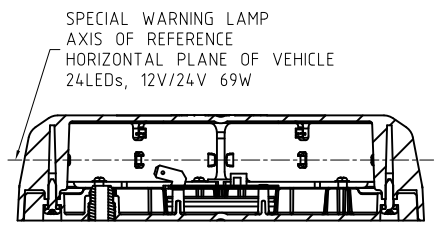


MAIN VIEW

SPECIAL WARNING LAMP
 CENTER OF REFERENCE
 24LEDs, 12V/24V 69W



SIDE VIEW



SECTION B-B

SPECIAL WARNING LAMP
 AXIS OF REFERENCE
 HORIZONTAL PLANE OF VEHICLE
 24LEDs, 12V/24V 69W




APPROVAL LABEL

- NOTE :
1. LENS AND HOUSING ARE SECURED WITH SCREWS.
 2. MATERIAL : LENS & Collimator : POLYCARBONATE,
HOUSING : POLYCARBONAT & ALUMINUM.
 3. THERE ARE TWO KINDS OF OUTER LENS COLOR,
ONE IS CLEAR AND ANOTHER IS AMBER.

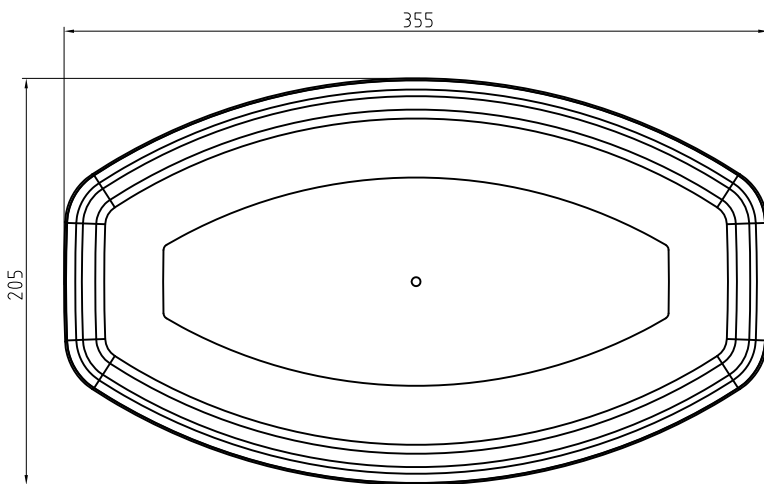
 巨輪興業有限公司
 JULUEN Enterprise Co.,Ltd.

④ 重點尺寸 ITEM MODIFY DATE DESIGNER KEVIN																						

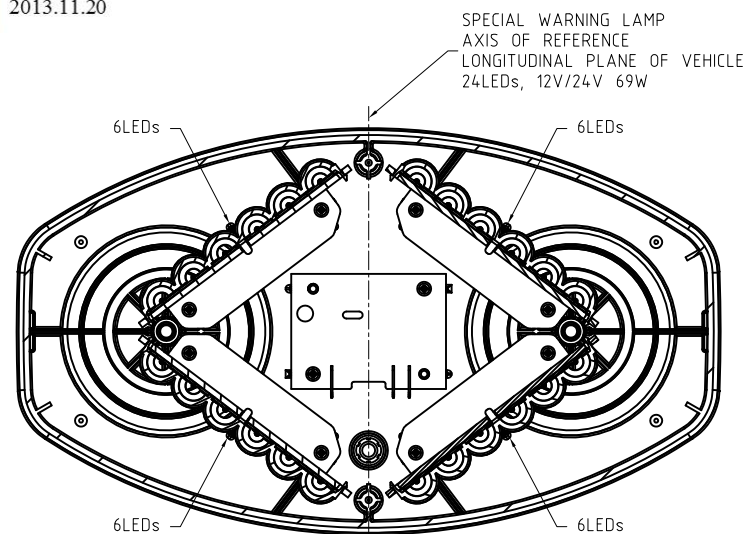
MODEL	DB TA1	TITLE	JULUEN			
MATERIAL		PR.NO				
APPROVAL	OSCAR	DATE	2012/09/16	PROJECTION		
CHECK		DATE		SCALE	1 : 1	UNITL mm
DESIGNER	KEVIN	DATE	2012/09/16	SHEET	1 / 1	REV 1.0



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 E-mail: homologation@vincotte.be
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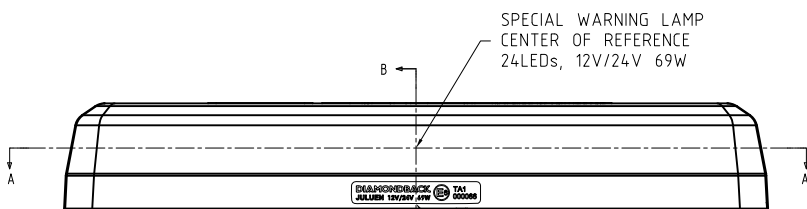


TOP VIEW



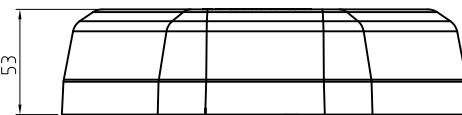
SECTION A-A

SPECIAL WARNING LAMP
 AXIS OF REFERENCE
 LONGITUDINAL PLANE OF VEHICLE
 24LEDs, 12V/24V 69W

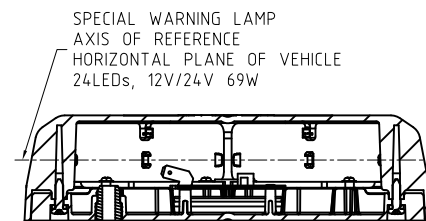


MAIN VIEW

SPECIAL WARNING LAMP
 CENTER OF REFERENCE
 24LEDs, 12V/24V 69W



SIDE VIEW



SECTION B-B

SPECIAL WARNING LAMP
 AXIS OF REFERENCE
 HORIZONTAL PLANE OF VEHICLE
 24LEDs, 12V/24V 69W



APPROVAL LABEL

NOTE :

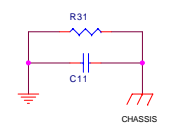
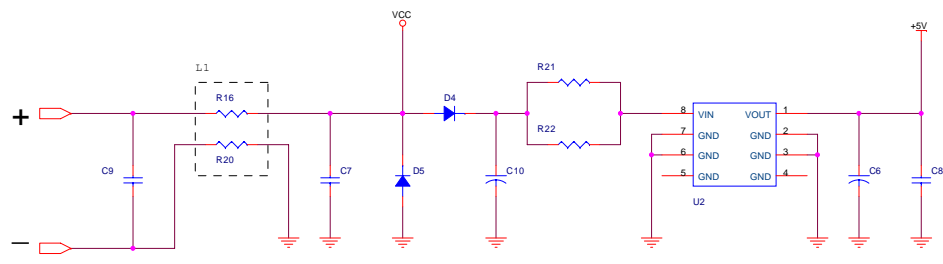
1. LENS AND HOUSING ARE SECURED WITH SCREWS.
2. MATERIAL : LENS & Collimator : POLYCARBONATE,
HOUSING : POLYCARBONAT & ALUMINUM.
3. THERE ARE TWO KINDS OF OUTER LENS COLOR,
ONE IS CLEAR AND ANOTHER IS AMBER.



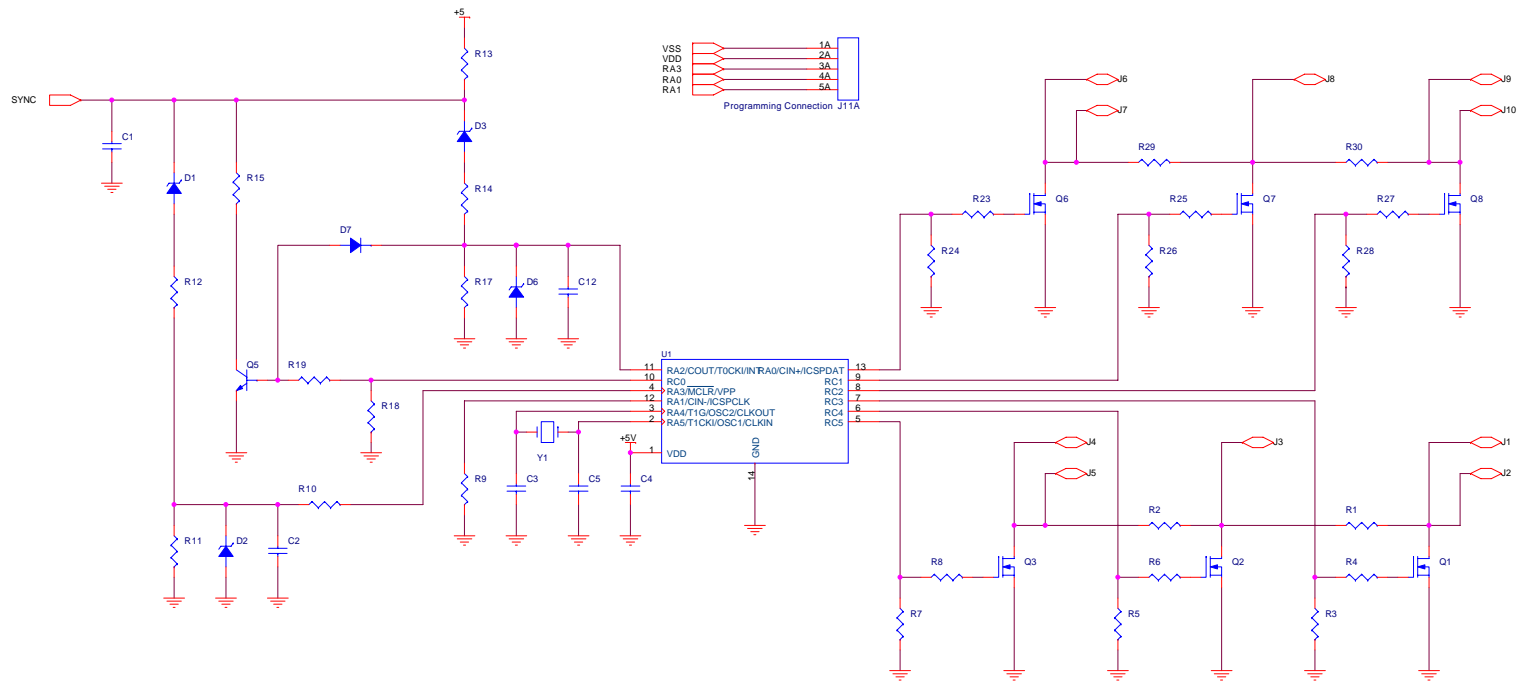
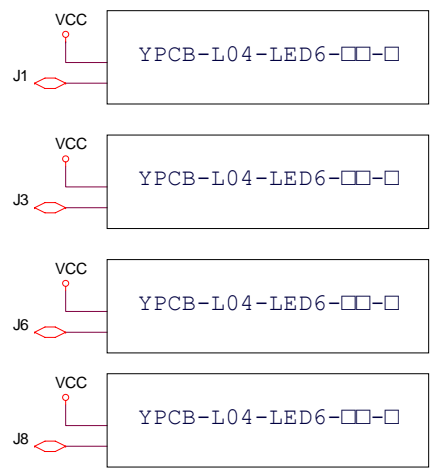
巨輪興業有限公司
 JULUEN Enterprise Co.,Ltd.

Ⓢ	重點尺寸	ITEM	MODIFY	DATE	DESIGNER	KEVIN	DATE	2012/09/16	SHEET	1 / 1	REV	1.0
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MODEL	DIAMONDBACK TA1	TITLE	JULUEN				
MATERIAL		PR.NO					
APPROVAL	OSCAR	DATE	2012/09/16	PROJECTION			
CHECK		DATE		SCALE	1 : 1	UNITL	mm
DESIGNER	KEVIN	DATE	2012/09/16	SHEET	1 / 1	REV	1.0



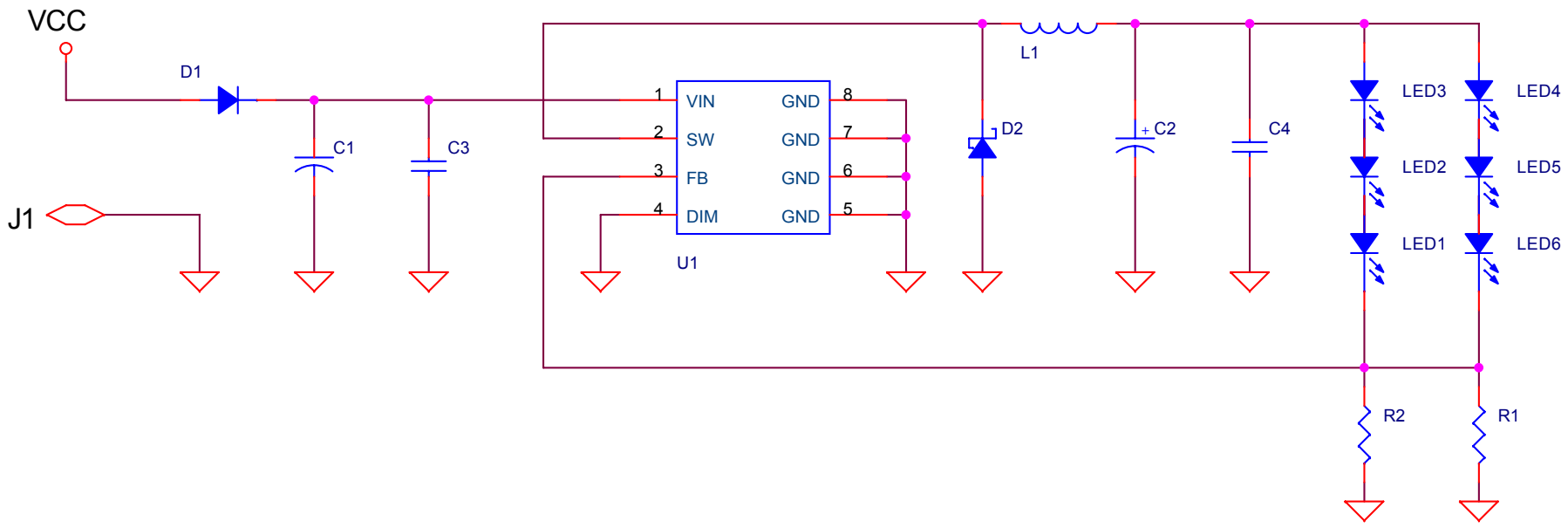
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 B-1800 Vilvoorde
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 2013.11.20



JULUEN Enterprise Co.,Ltd.		
Title	L04	
Size	Document Number	Rev
C	YPCB-L04-CTR-D3	1.0
Date:	Monday, July 08, 2013	Sheet 1 of 1



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 2013.11.20



JULUEN Enterprise Co.,Ltd.		
Title L04		
Size A	Document Number YPCB-L04-LED6-D3-□	Rev 1.0
Date:	Monday, July 08, 2013	Sheet 1 of 1