



Technical Report No.: 14-00497-CX-SHA-00
Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
Type: DF-TRL011

TECHNICAL REPORT

No.: 14-00497-CX-SHA-00

Test according to ECE regulation relating to

Rear registration plate lamps

ECE Regulation No. 4

(LED)


including all amendments up to
supplement 16 to the 00 series of amendments

Approvals granted up to now		
ECE	Number of approval	Date
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Type: DF-TRL011

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I. Technical data

- 0.1. Make (trade name of manufacturer) : 
- 0.2. Type : DF-TRL011
- 0.2.1. Variants : N/A
- 0.3. Means of identification of type : By letters and digits
- 0.4. Concise description : 1) 1, 1W
2) 2, 2W
- Device for illuminating : a tall plate/a wide plate/a plate for agricultural or forestry tractor
- Number and category(ies) of light source(s) : 2, 5*LED
- Light source module : ~~yes~~/no
- Light source module specific identification code : N/A
- Geometrical conditions of installation : See the information document
- 0.5. Name and address of manufacturer : Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai City,
Taizhou City, Zhejiang Province, 317000
- 0.8. Address of assembly plant : See 0.5.
- 0.9. Location of the approval mark : Marked on lens
- 0.10. If applicable, name and address of manufacturer's representative : N/A



II. Test record

1. Test conditions

- 1.1. Technical data of the test samples: Four samples are tested.
For information about the form of the lamp, the position of the reference point and the reference axis, see information document
- 1.2. Test procedures used: According to ECE Regulation No. 4.00
- 1.3. Measuring and test equipment: The above equipments on which the tests were carried out fulfilled the requirements of ECE Regulation No. 4.00
- 1.4. Standard bulb: N/A
- Luminous flux: N/A

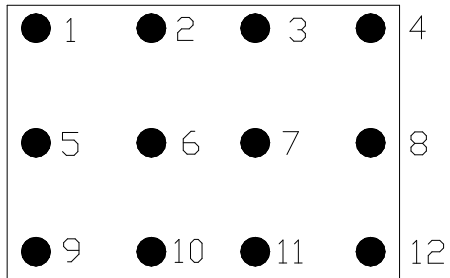
2. Test results

2.1. General Specifications:

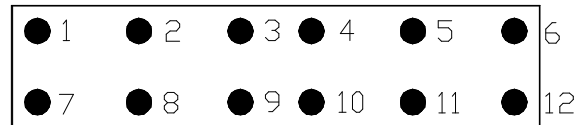
The devices for the illumination of rear registration plates have been constructed that the whole surface of the plate are visible within the angles.

2.2. Intensity of light emitted

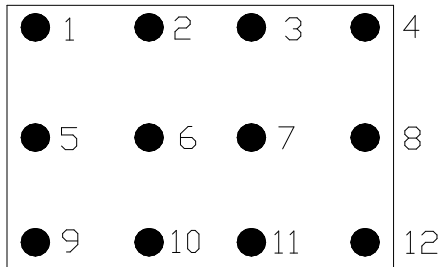
Tall Plate (340mm x 240mm)



Wide Plate (520mm x 120mm)



Tractor Plate (240mm x 165mm)



Technical Report No.: 14-00497-CX-SHA-00
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Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-a,x=13.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	150.50	24.40	12.50	10.50	23.90	147.70	148.60	21.80	11.70	11.80	22.40	144.40
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1,2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30 min
 (Position A-a,x=13.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	149.40	23.30	11.30	9.90	23.00	145.20	147.70	20.50	10.50	11.00	21.60	143.10
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position A-a,x=13.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	148.30	23.20	12.20	11.00	22.50	145.40	146.50	22.10	11.80	10.40	21.70	144.70
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position A-a,x=13.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	147.10	21.90	11.40	10.10	21.60	144.10	145.40	21.40	11.00	9.30	21.00	143.50
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2 \text{ (cm)}} \leq 2 \times B_0 / \text{cm}$	Complies	Complies

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Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-a,x=13.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	90.40	20.00	9.10	9.90	20.30	91.80	91.50	20.30	9.40	10.10	21.00	91.60
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1,2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30 min
 (Position A-a,x=13.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	89.30	19.50	8.50	9.00	19.50	90.80	90.40	19.60	8.70	9.30	20.40	90.50
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position A-a,x=13.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	90.00	19.70	9.30	9.60	19.90	90.50	89.80	19.40	9.50	9.90	20.20	90.90
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position A-a,x=13.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	88.50	19.00	8.60	8.80	19.00	89.40	88.30	18.50	8.40	9.00	19.30	89.60
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} (\text{cm}) \leq 2 \times B_0 / \text{cm}$	Complies	Complies

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Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-a, x=23.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	92.40	22.80	10.70	11.30	22.40	92.00	94.80	22.00	11.10	11.00	22.90	92.70
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1,2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30 min
 (Position A-a, x=23.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	91.50	21.90	10.00	10.30	21.30	90.80	92.90	21.10	10.40	9.90	22.00	91.90
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position A-a, x=23.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	91.90	22.50	10.40	11.80	21.60	92.80	90.40	20.30	10.60	10.90	21.00	91.50
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position A-a, x=23.5mm, y=65mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	90.70	21.60	9.70	10.90	20.50	91.90	89.60	19.60	9.90	10.00	20.30	90.40
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} (\text{cm}) \leq 2 \times B_0 / \text{cm}$	Complies	Complies

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-a, x=23.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	91.70	19.50	9.60	10.10	19.80	90.60	90.30	19.00	10.30	9.80	19.30	90.00
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position A-a, x=23.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	90.90	19.00	8.80	9.30	18.90	89.40	89.60	18.40	9.40	9.00	18.50	89.20
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position A-a, x=23.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	91.30	19.90	10.10	9.90	20.20	91.90	92.10	20.40	10.70	10.60	21.00	93.10
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30 min
 (Position A-a, x=23.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	90.20	19.00	9.50	9.20	10.40	90.70	91.00	19.50	9.80	10.00	20.10	92.20
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} \leq 2 \times B_0 / \text{cm}$	Complies	Complies

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-b,x=13.5mm, y=55mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	203.20	27.70	13.50	14.10	29.30	195.70	199.80	25.20	15.20	15.80	28.30	191.10
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position A-b,x=13.5mm, y=55mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	201.80	27.10	13.00	13.40	28.40	194.90	198.60	24.70	14.60	15.10	27.50	190.30
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1 min
 (Position A-b,x=13.5mm, y=55mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	202.40	28.60	14.00	14.70	30.00	199.60	200.50	26.90	15.50	16.00	29.80	196.20
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30 min
 (Position A-b,x=13.5mm, y=55mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	200.50	28.00	13.50	14.20	29.30	198.80	199.20	26.30	15.00	15.40	29.00	195.40
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} (\text{cm}) \leq 2 \times B_0 / \text{cm}$	Complies	Complies

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-c,x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	48.40	14.40	4.20	4.60	16.10	47.00	53.50	15.00	4.80	5.30	16.70	51.70
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position A-c,x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	47.30	13.80	3.80	4.00	15.50	46.00	52.00	14.30	4.20	4.70	16.10	50.70
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1 min
 (Position A-c,x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	50.30	15.80	4.50	4.80	16.20	50.00	51.40	16.10	4.70	5.00	16.50	50.50
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30 min
 (Position A-c,x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	49.40	15.10	4.00	4.20	15.60	49.30	50.60	15.50	4.20	4.40	15.90	49.60
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} \leq 2 \times B_0 / \text{cm}$	Complies	Complies

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Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-c,x=48.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	89.30	20.10	16.40	16.00	21.30	90.50	90.80	20.90	16.80	17.10	22.00	91.20
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position A-c,x=48.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	88.40	19.30	15.50	15.20	20.40	89.00	89.60	20.00	16.00	16.20	21.10	90.00
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position A-c,x=48.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	88.90	19.90	14.80	14.60	19.50	89.10	91.40	21.00	15.70	15.00	20.70	90.60
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position A-c,x=48.5mm, y=75mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	88.00	19.30	14.00	13.70	18.50	88.30	90.20	20.20	14.80	14.10	19.60	89.50
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} (\text{cm}) \leq 2 \times B_0 / \text{cm}$	Complies	Complies

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Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position A-c,x=48.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	86.80	19.60	14.20	16.40	23.50	86.70	83.30	21.60	17.00	17.10	21.10	87.30
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position A-c,x=48.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	85.70	18.80	13.50	15.60	22.20	85.60	82.10	20.50	16.20	16.30	20.40	86.30
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position A-c,x=48.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	85.50	20.10	14.60	15.80	22.70	86.40	84.00	20.50	16.30	16.90	23.00	85.80
Corrected Luminance Meas. (B) x CF	N/A											

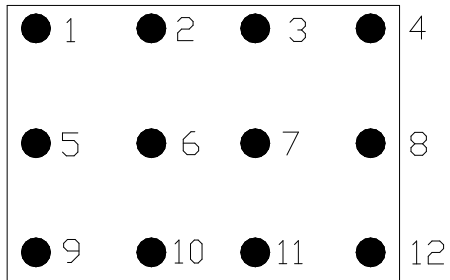
Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position A-c,x=48.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	84.30	19.40	14.00	15.20	22.00	85.50	83.10	19.50	15.50	16.30	22.20	84.90
Corrected Luminance Meas. (B) x CF	N/A											

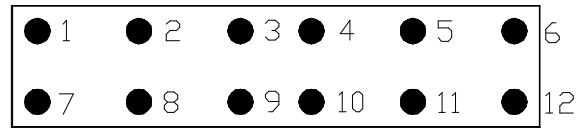
	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2 (\text{cm})} \leq 2 \times B_0 / \text{cm}$	Complies	Complies

2.3. Intensity of light emitted

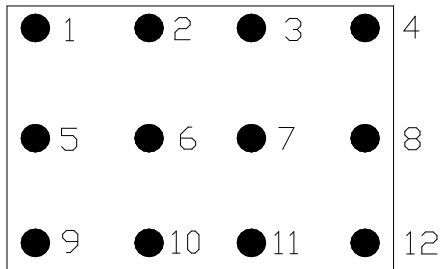
Tall Plate (340mm x 240mm)



Wide Plate (520mm x 120mm)



Tractor Plate (240mm x 165mm)



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 Type: DF-TRL011

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position B, x=13.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	32.63	19.60	19.70	46.30	209.30	41.10	38.80	189.80	41.60	20.30	20.90	44.70
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position B, x=13.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	31.90	19.40	19.20	45.00	206.90	40.20	38.00	188.70	41.10	19.80	20.20	43.90
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position B, x=13.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	34.50	20.50	20.40	46.20	205.60	42.00	40.30	190.50	42.10	20.80	212.30	45.60
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min (Position B)
 (Position B, x=13.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	33.70	19.90	19.70	45.40	204.50	41.20	39.60	189.40	41.60	20.00	20.30	44.70
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} \leq 2 \times B_0 / \text{cm}$	Complies	Complies

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position B, x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	21.30	12.00	11.80	20.50	51.50	21.60	20.50	50.40	23.90	14.10	13.70	21.80
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position B, x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	20.80	11.40	11.00	19.50	50.90	20.80	19.90	49.30	22.60	13.30	13.00	21.10
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position B, x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	20.00	11.70	11.50	19.10	52.60	20.20	18.70	49.10	24.90	13.70	13.00	22.00
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position B, x=13.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	19.40	11.10	11.00	18.50	51.80	19.50	18.00	48.30	24.20	13.00	12.40	21.10
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} (\text{cm}) \leq 2 \times B_0 / \text{cm}$	Complies	Complies

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 Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
 Type: DF-TRL011

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position B, x=23.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	43.70	20.10	19.30	45.60	190.90	40.00	37.30	200.00	50.40	23.40	24.20	52.90
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position B, x=23.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	42.50	19.80	18.80	44.90	190.00	39.40	36.60	199.10	49.60	22.50	23.30	52.00
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position B, x=23.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	45.00	21.50	21.20	46.30	192.30	41.10	40.30	197.10	50.90	23.90	24.00	50.20
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position B, x=23.5mm, y=50mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	44.20	20.70	20.30	45.50	191.50	40.10	39.50	196.30	50.00	23.00	23.20	49.50
Corrected Luminance Meas. (B) x CF	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} (\text{cm}) \leq 2 \times B_0 / \text{cm}$	Complies	Complies

Technical Report No.: 14-00497-CX-SHA-00
 Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
 Type: DF-TRL011

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 1min
 (Position B, x=23.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	21.00	13.80	13.20	24.40	53.70	23.40	20.40	51.50	27.00	15.00	15.10	28.60
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 1, 2 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 28.00V, after 30min
 (Position B, x=23.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	20.30	13.10	12.50	23.50	52.60	22.70	19.60	50.50	26.30	14.50	14.50	27.80
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 1min
 (Position B, x=23.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
Luminance Measurements (B)	22.10	14.20	14.00	25.80	54.00	24.00	21.50	52.80	26.80	15.60	15.50	27.00
Corrected Luminance Meas. (B) x CF	N/A											

Sample No. 3, 4 (LUMINANCE $\geq 2.5\text{cd/m}^2$), at test voltage 13.50V, after 30min
 (Position B, x=23.5mm, y=100mm)

	1	2	3	4	5	6	7	8	9	10	11	12
	21.50	13.40	13.50	25.00	52.90	23.20	20.70	51.50	25.80	14.70	14.80	26.00
	N/A											

	Sample No. 1, 2	Sample No. 3, 4
Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2} (\text{cm}) \leq 2 \times B_0 / \text{cm}$	Complies	Complies



Technical Report No.: 14-00497-CX-SHA-00
Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
Type: DF-TRL011

2.4. Incidence of the light

Incidence of the light on the surface of the plate is not exceed 82° at any point of the surface to be illuminated

Complies

2.5. Colour of the light

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

Complies

3. Specimen submitted to test on: 29.05.2014 (DD.MM.YYYY)

4. Place of test: JSHC, Tianjin, P.R. China

Date of test: 29.05.2014 (DD.MM.YYYY)

III. Enclosures

Manufacture's information document No.: Doc.: DF-TRL011-01

Dated on: 29.05.2014 (DD.MM.YYYY)

IV. Statement of conformity

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

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

München, 04.06.2014
 (DD.MM.YYYY)



Gu Qing

Test Laboratory / DIN EN ISO 17025

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