



AUTOMOTIVE MANUFACTURERS EQUIPMENT
COMPLIANCE AGENCY, INC.

AMECA NOTICE OF EQUIPMENT COMPLIANCE™

This notice verifies that the item described below has been tested by an accredited laboratory and has been found to be in compliance with the jurisdictional standard(s) listed below where applicable. The issuance of this AMECA Notice of Equipment Compliance™ does not denote or imply any endorsement or recommendation of the item described below.

Notification Number: 192027

Test Report Date: December 16, 2019

Expiration Date: January 1, 2023

Applicant: Guangzhou Loyo Electronic Technology Co., Ltd.
102 A Building, Number 1, Yi heng Road, North Street,
Qing Hu Cai Tian, Jun He Town, Baiyun District,
Guangzhou, Guangdong
P. R. China

Item: "DOT7-002" - Headlamp - White In Colour

Use: On 2007-2017 Model Years Jeep Wrangler Motor Vehicles

Jurisdictional Compliance Standard(S)
Identical To: United States FMVSS 571.108 Photometric Only

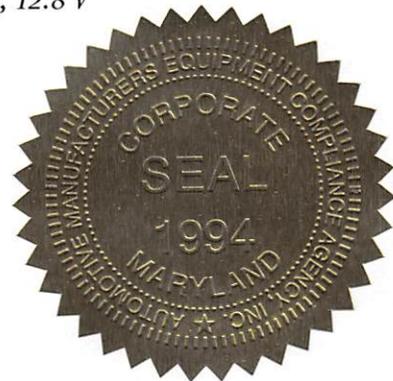
Item Markings: Lens: DOT SAE HL VOL 12V LY DOT7-002
Housing: (None)

Lightsource: Lower Beam Headlamp: 39 LED's, 12.8V
Upper Beam Headlamp: 46 LED's, 12.8V

Test Lab: ISOQA Technical Service Co., Ltd.
Report Number: ISOQA-19-0585



Executive Director



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Report No. : ISOQA-19-0585

Test Component : DOT7-002

Applicant : GUANGZHOU LOYO ELECTRONIC
TECHNOLOGY CO., LTD



SAFETY COMPLIANCE TESTING FOR FMVSS 108

Lamps, Reflective Devices, and Associated Equipment

* * * * *

ISOQA Technical Service Co., Ltd.

60, Yong Long Road,
Da-Li, Taichung, 41257
Taiwan

TEST REPORT



Arthur Chang

Signature of Responsible Laboratory Official

Title: Laboratory Manager

Approval Date

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Report Prepared By : Lisa Liu
 Review By : Julie Wu
 Approval By : Arthur Chang

Report No. : ISOQA-19-0585

Test Component : DOT7-002
 Applicant : GUANGZHOU LOYO ELECTRONIC TECHNOLOGY CO., LTD

PRODUCT INFORMATION

Test Component	DOT7-002
Applicant	GUANGZHOU LOYO ELECTRONIC TECHNOLOGY CO., LTD 102 A Building, Number 1, Yi heng Road, North Street, Qing Hu Cai Tian, Jun He Town, Baiyun District, Guangzhou, Guangdong, China
Manufacturer	same as Applicant
Trade Mark	LY
Lens Material	Teijin Panlite L-1250Z Polycarbonate 100 Clear #
Coating of Exterior Lens	Teijin SM710
Inner Lens Material	Mitsubishi ACRYPET VH Polymethyl Methacrylate 001 Clear
Reflex Reflector Material	-
Applicable Vehicle	jeep wrangler 07-17year
Rated Voltage	12 V
Marking on Lens	DOT SAE HL VOL 12V LY DOT7-002
Marking on Housing	-
Method of Mounting to Vehicle	bolted

* Above-mentioned information is provided by the applicant

Functions	Headlamp - Lower Beam	Headlamp - Upper Beam			
Requirements	FMVSS 108	FMVSS 108			
Identification Code of SAE J759	HL	HL			
Number of Compartments or Lamps	1	1			
Color of Lens	Clear	Clear			
Color of Light Emitted	White	White			
Light Source Designation	LED x 39	LED x 42			
Design Voltage	12.8 V	12.8 V			
Rated Mean Spherical Candlepower	-	-			
Effective projected illuminated area of lens (mm ²)	N/A	N/A			
Method of determination	N/A	N/A			
Test Item	Inspector	Date	Number of Tested		
Physical Inspection	Tan Liao	2019/10/23	2	2	
Photometry Test	Tan Liao	2019/10/23	2	2	
Color Test	Tan Liao	2019/10/23	2	2	

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**HEADLAMP TEST REPORT**

Test Component	DOT7-002
Applicant	GUANGZHOU LOYO ELECTRONIC TECHNOLOGY CO., LTD
Test Laboratory	ISOQA Technical Service Co., Ltd.
Test Date	2019/10/23
Report Number	ISOQA-19-0585
Number of devices tested	See below
Light source Designation	Upper Beam - LED x 42 Lower Beam - LED x 39

SUMMARY

Test Description	Test Results	
	Number Passed	Number Failed
- Physical Inspection	2	-
- Photometry Test	2	-
- Color Test	2	-
- Dust Test	No Tested	-
- Corrosion Test	No Tested	-
- Vibration Test	No Tested	-
- Abrasion Test	No Tested	-
- Chemical Resistance Test	No Tested	-
- Temp. Cycle Test	No Tested	-
- Internal Heat Test	No Tested	-
- Humidity Test	No Tested	-

Remarks : _____

Signature of Responsible Laboratory Official

Title : Laboratory Manager

Date: : December 2, 2019

Report No. : ISOQA-19-0585

Test Component : DOT7-002
 Applicant : GUANGZHOU LOYO ELECTRONIC TECHNOLOGY CO., LTD

PHOTOMETRY TEST

Test Performed by : Tan Liao Date : 2019/10/23
 Test distance(m) : 25 m Test Voltage : 12.8 V
 Light Source Designation : Upper Beam - LED x 42 / Lower Beam - LED x 39

Steady Burning at H - V (according to SAE J2650)	Sample 1			Sample 2		
	1 min.	Steady	Ratio	1 min.	Steady	Ratio
	27888.92	25538.17	1.09	29229.35	27548.81	1.06

UB3 - Upper Beam Photometric Test Point Values

Test Points	Minimum (cd)	Maximum (cd)	Sample 1	Sample 2
			Measured	Measured
2U - V	1000	-	23807.62	18916.05
1U - 3L	2000	-	26998.64	25068.02
1U - 3R	2000	-	26958.63	26088.35
H - V	20000	75000	25538.17	27548.81
H - 3L	10000	-	25168.05	26808.58
H - 3R	10000	-	25378.12	26958.63
H - 6L	3250	-	22577.22	23317.46
H - 6R	3250	-	22687.26	24327.78
H - 9L	1500	-	19366.20	19076.10
H - 9R	1500	-	18796.01	20056.42
H - 12L	750	-	13424.29	11943.82
H - 12R	750	-	14764.72	15795.05
1.5D - V	5000	-	17025.45	20636.60
1.5D - 9L	1500	-	11023.53	15294.89
1.5D - 9R	1500	-	10753.44	12674.05
2.5D - V	2500	-	7268.33	10613.40
2.5D - 12L	750	-	4481.43	6320.02
2.5D - 12R	750	-	4513.44	5419.73
4D - V	-	5000	1485.48	1910.61

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Steady Burning at 1.5D - 2R (according to SAE J2650)	Sample 1			Sample 2		
	1 min.	Steady	Ratio	1 min.	Steady	Ratio
	37351.95	34511.04	1.08	37031.85	33190.62	1.12

LB3V - Lower Beam Photometric Test Point Values

Test Points	Minimum (cd)	Maximum (cd)	Sample 1	Sample 2
			Measured	Measured
10U to 90U	-	125	39.89	32.54
4U - 8L	64	-	69.92	85.92
4U - 8R	64	-	81.13	107.13
2U - 4L	135	-	147.94	152.93
1.5U - 1R to 3R	200	-	472.58	471.64
1.5U - 1R to R	-	1400	551.86	536.76
1U - 1.5L to L	-	700	298.93	243.75
0.5U - 1.5L to L	-	1000	365.31	290.91
0.5U - 1R to 3R	500	2700	(651.24)	(578.49)
			791.54	771.18
H - 4L	135	-	265.79	194.86
H - 8L	64	-	136.74	129.64
0.6D - 1.3R	10000	-	33300.65	29559.46
0.86D - V	4500	-	31340.03	28699.18
0.86D - 3.5L	1800	12000	4437.42	4659.49
1.5D - 2R	15000	-	34511.04	33190.62
2D - 9L	1250	-	6182.98	4492.44
2D - 9R	1250	-	6630.12	5282.69
2D - 15L	1000	-	5090.63	3507.12
2D - 15R	1000	-	6029.93	5859.88
4D - 4R	-	12500	8582.75	8552.74
4D - 20L	300	-	4957.59	4953.58
4D - 20R	300	-	4248.36	3553.14

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Front View



Side View



Top View



Rear View



DOT SAE HL VOL 12V LY DOT7-002

DOT SAE HL VOL 12V LY DOT7-002

Marking