



NSAI

ECE TYPE-APPROVAL CERTIFICATE



Communication concerning:

Approval granted
~~Approval extended~~
~~Approval refused~~
~~Approval withdrawn~~
~~Production definitively discontinued~~

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

Approval No: **E24*50R01/00*0577*00**



1. Trade name or mark of the device:
2. Manufacturer's name for the type of device: **MS-F800HA**
3. Manufacturer's name and address: **Guangzhou MorSun Technology co.,Ltd
Room 201, 2/F, No.10 Rongxi Industrial
Street, Baiyun Lake Street, Baiyun District,
Guangzhou City, Guangdong Province
510000 P.R. China**
4. If applicable, name and address of manufacturer's representative: **N/A**
5. Submitted for approval on: **19.05.2021**
6. Technical service responsible for conducting approval tests: **ISOQA Technical Service Co., Ltd.
60, Yong Long Road,
41257 Da-Li, Taichung
Taiwan**
7. Date of test report issued by that service: **19.05.2021**
8. Number of report issued by that service: **ISOQA-21-0234-R50**



NSAI

Approval No: E24*50R01/00*0577*00

9. Concise description¹:

By category of lamp:

-

Colour of light emitted (~~red~~/ white/~~amber~~):

White

Number and category(ies) of light source(s):

***1 non replaceable light source
(1 MD E24 0577-2 non repladceable LED
Module and 52 non replaceable LEDs
connected as 1 light source)***

Light source module: yes/~~no~~²

Yes

Light source module specific identification code:

MD E24 0577-2

Geometrical conditions of installation and relating variations, if any:

***Reference axis parallel to the median
longitudinal plane of the vehicle and
parallel to the bearing plane of the vehicle
on the road (see drawing)***

Application of an electronic light source control gear/variable intensity control:

(a) Being part of the lamp: yes/~~no~~/~~not applicable~~:

Yes

(b) Being not part of the lamp: ~~yes~~/~~no~~/~~not applicable~~:

No

Input voltage(s) supplied by an electronic light source control gear/variable intensity control:

N/A

Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body):

N/A

Only for limited mounting height of equal to or less than 750mm above the ground: ~~yes~~/~~no~~²

No

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

Front position lamp: ~~yes~~/~~no~~²

No

Rear position lamp: ~~yes~~/~~no~~²

N/A

Stop lamp: ~~yes~~/~~no~~²

N/A

Sequential activation of light sources

(see paragraph 6.8. of this Regulation): ~~yes~~/~~no~~²

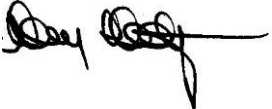
N/A

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



NSAI

Approval No: E24*50R01/00*0577*00

10. Position of the approval mark: *On the lens*
11. Reason(s) for extension (if applicable): *N/A*
12. Approval granted/~~extended~~/~~refused~~/~~withdrawn~~: *Granted*
13. Place: *Dublin*
14. Date: *26th May, 2021*
15. Signature: 



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



NSAI

Approval No: E24*50R01/00*0577*00

Index to the Information Package

Date of issue: *26th May, 2021*

Date of latest amendment: *N/A*

Reason for extension/revision: *N/A*

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

2. Test report(s)

- numbers(s): *ISOQA-21-0234-R50*

- date of issue: *19.05.2021*

- date of latest amendment: *N/A*

3. Information document

- number(s): *ISOQA-21-0234-Appendix 1_Information Document*

- date of issue: *30.03.2021*

- date of latest amendment: *N/A*

Documentation: *14 pages*



Approval No: E24*50R01/00*0577*00

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

A: Additional conditions:

1. The device, type MS-F800HA, shall be marked as prescribed in the regulation.
2. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
3. Each individual product from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
4. Changes in the product are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
5. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type of product no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
6. NSAI may at any time check the correct performance of the duties imposed by the grant of this Type Approval, and in order to do so, may make tests, or have tests made.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to the NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the vehicle, system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B : Legal Options

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

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd



TEST REPORT

Concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations

Uniform provisions concerning the approval of front position lamps, rear position lamps, stop lamps, direction indicators and rear registration plate illuminating devices for vehicles of category L

Tested according to ECE-R50, 01 Series of 15 October 2019


Kind of device: Front Position Lamp

| Approval status | |
|-----------------|---|
| X | Application for granting of a type approval |
| | Application for an extension of type approval No. |
| | Reason for the extension: |

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

0. General

- 0.1. Make (trade name of manufacturer) : 
- 0.2. Type : MS-F800HA
- 0.3. Version / Variant : --
- 0.4. Manufacturer's name and address : Guangzhou MorSun Technology co.,Ltd
Room 201, 2/F, No.10 Rongxi Industrial Street, Baiyun Lake
Street, Baiyun District, Guangzhou City, Guangdong Province
510000 P.R. China
- 0.4.1 Name and address of manufacturer's representative : --
- 0.5. Test laboratory : ISOQA Technical Service Co., Ltd.
60, Yong Long Road,
41257 Da-Li, Taichung
Taiwan

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
 Type : MS-F800HA
 Manufacturer : Guangzhou MorSun Technology co.,Ltd

1. Test object (s)**1.1. Information :**

| | | |
|------------------------|--|--|
| Material of Outer Lens | Teijin Panlite L-1225Z 100 PC with GE UVHC3000 coating | |
| Material of Inner Lens | PMMA | |
| Material of Housing | Aluminium alloy | |
| Material of Reflector | - | |
| Rated Voltage | 12 V | |
| Front Position Lamp | Category | - |
| | Light Source | 1 x LED Module + 52 LEDs, 12 V, 1.5W Detail see 1.3.2 |
| | Light Source Control Gear | Type : part of the lamp and include into the lamp body |
| | Color of light emitted | White |
| | Color of outer lens | Clear |
| | Color of inner lens | Clear with pattern |
| | Visibility | The visibility angles are symmetrical, the horizontal arrow is not required. |
| | Grouped with | Driving beam and Passing beam |
| | Combined with | -- |
| | Incorporated with | -- |

1.2. Location of Marking : see Appendix 2

1.3. Remark(s) :

1.3.1 There are no objections against the variants that may be described in the Information folder respectively the information document by the manufacturer because adversely effects are not expected.

The lamps are part of the same assembly of grouped, combined or reciprocally incorporated lamps. Each of these lamps satisfies the requirements of the relevant regulation.

1.3.2 1 x non-replaceable LED Module (MD E24 0577-2; 5 of 8 LEDs in used) + 52 non-replaceable LEDs.
 Light sources layout please see Appendix 2.

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

2. Test Specification

- 2.1. Place of test : Laboratory of ISOQA in Taiwan
- 2.2. Date of test : 2021/4/14 ~ 2021/5/19
- 2.3. Date of receipt of test device(s) : 2021/4/14
- 2.4. Test results :
- 2.4.1. Markings (according to ECE R50.01 paragraph 4)
- | | | |
|--|----------------|--------------------------|
| a. trade name or mark | Complies | see Appendix 2 |
| b. Category of Light sources or light source module specific identification code | Not Applicable | Non-replace light source |
| c. Space reserved for the approval mark | Complies | see Appendix 2 |
| d. rated voltage or the range of voltages | Complies | see Appendix 2 |
| e. marking on replaceable light source module | Not Applicable | |
- 2.4.2. General Specifications (according to ECE R50.01 paragraph 6)
- | | |
|--|----------------|
| a. maintenance of satisfactory operation and of photometric characteristics | Complies |
| b. rear position lamp reciprocally incorporated with a stop lamp | Not Applicable |
| c. replaceable light source(s) | Not Applicable |
| d. sequential activation of light sources | Not Applicable |
| e. Light source module(s) | Not Applicable |
| f. non-replaceable filament lamp(s) or light source module(s) equipped with non-replaceable filament lamp(s) | Not Applicable |

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

- 2.4.3 Intensity of light emitted (according to ECE R50.01 paragraph 7)
- | | | | |
|----|--|----------------|-----------|
| a. | Light distribution | Complies | see 3.1 |
| b. | Visibility | Complies | see 3.1 |
| c. | Failure of a single lamp containing more than one light source | Not Applicable | see 2.5.1 |
- 2.4.4 colour of light emitted
(according to ECE R50.01 paragraph 9)
- | | | | |
|--|--|----------|---------|
| | | Complies | see 3.2 |
|--|--|----------|---------|
- 2.4.5 rear-registration-plate illuminating device (according to ECE R50.01 Annex 5)
- | | | | |
|----|-----------------------------|----------------|--|
| a. | Space to be illuminated | Not Applicable | |
| b. | Colour of the light | Not Applicable | |
| c. | Angle of incidence | Not Applicable | |
| d. | Photometric characteristics | Not Applicable | |
- 2.5. Remark (s)
- 2.5.1 According to manufacturer's technical description all light sources are controlled via control gear, if one LED fails, all LEDs will fail, therefore they are considered to be one light source.
- 2.5.2 LED module specific identification code : MD E24 0578-2

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
 Type : MS-F800HA
 Manufacturer : Guangzhou MorSun Technology co.,Ltd

3. Performance test(s)**3.1. Photometric measurements test record**

Function : Front Position Lamp Category : -
 Test Voltage : 13.5 V Light Source : see 1.3.2
 Test Distance : 3.182 m Current : 0.112 A / 0.112 A

| Test Point | Minimum (cd) | maximum (cd) | Sample 1 | | | Sample 2 | | |
|---------------------------|-----------------|-----------------|----------|---------|--------------------|----------|---------|--------------------|
| | | | 1 min | Value | n-1 ⁽¹⁾ | 1 min | Value | n-1 ⁽¹⁾ |
| H - V | 4 | 140 | 43.980 | 43.860 | - | 46.910 | 46.390 | - |
| 10U - 5L | 0.8 | 140 | 25.199 | 25.130 | - | 28.496 | 28.180 | - |
| 10U - 5R | 0.8 | 140 | 28.849 | 28.770 | - | 27.262 | 26.960 | - |
| 5U - 20R | 0.4 | 140 | 11.301 | 11.270 | - | 12.124 | 11.990 | - |
| 5U - 10R | 0.8 | 140 | 21.017 | 20.960 | - | 21.256 | 21.020 | - |
| 5U - V | 2.8 | 140 | 37.031 | 36.930 | - | 40.226 | 39.780 | - |
| 5U - 10L | 0.8 | 140 | 19.232 | 19.180 | - | 23.683 | 23.420 | - |
| 5U - 20L | 0.4 | 140 | 10.990 | 10.960 | - | 13.156 | 13.010 | - |
| H - 10L | 1.4 | 140 | 22.291 | 22.230 | - | 26.635 | 26.340 | - |
| H - 5L | 3.6 | 140 | 34.845 | 34.750 | - | 40.600 | 40.150 | - |
| H - 5R | 3.6 | 140 | 41.233 | 41.120 | - | 38.173 | 37.750 | - |
| H - 10R | 1.4 | 140 | 24.788 | 24.720 | - | 23.511 | 23.250 | - |
| 5D - 20R | 0.4 | 140 | 12.564 | 12.530 | - | 13.277 | 13.130 | - |
| 5D - 10R | 0.8 | 140 | 25.480 | 25.410 | - | 24.198 | 23.930 | - |
| 5D - V | 2.8 | 140 | 44.973 | 44.850 | - | 47.557 | 47.030 | - |
| 5D - 10L | 0.8 | 140 | 23.284 | 23.220 | - | 26.221 | 25.930 | - |
| 5D - 20L | 0.4 | 140 | 12.063 | 12.030 | - | 13.217 | 13.070 | - |
| 10D - 5L | 0.8 | 140 | 29.651 | 29.570 | - | 33.147 | 32.780 | - |
| 10D - 5R | 0.8 | 140 | 34.645 | 34.550 | - | 32.703 | 32.340 | - |
| Visibility ⁽²⁾ | 0.05 | 140 | (0.118) | (0.118) | - | (0.120) | (0.119) | - |
| | | | 46.389 | 46.262 | | 48.416 | 47.879 | |
| Result | | | PASS | PASS | - | PASS | PASS | - |

(1) Not Applicable; all light sources are controlled via control gear, if one LED fails, all LED will fail, therefore they are considered to be one light source

(2) Vertical angles: $\pm 15^\circ$; Horizontal angles: $\pm 80^\circ$

Test Report No. : ISOQA-21-0234-R50

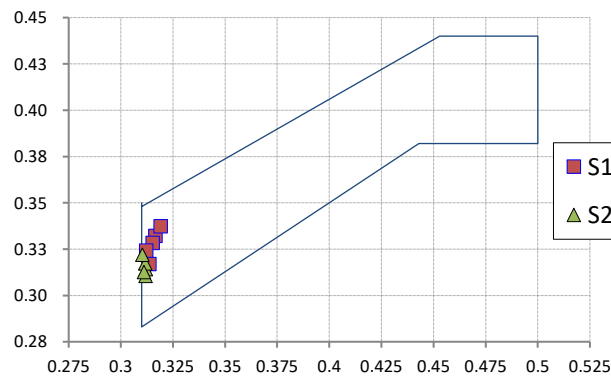
Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

3.2. Color of light emitted test record

Function : Front Position Lamp Category : -
Test Voltage : 13.5 V Light Source : see 1.3.2
Distance : 3.182 m Current : 0.112 A / 0.112 A

| Color of light emitted | Test Point | Sample 1 | | Sample 2 | | Result |
|------------------------|------------|----------|--------|----------|--------|--------|
| | | x | y | x | y | |
| White | H - V | 0.3165 | 0.3322 | 0.3119 | 0.3142 | PASS |
| | H - 10L | 0.3152 | 0.3285 | 0.3118 | 0.3107 | PASS |
| | H - 10R | 0.3136 | 0.3171 | 0.3116 | 0.3174 | PASS |
| | 5U - V | 0.3191 | 0.3374 | 0.3103 | 0.3221 | PASS |
| | 5D - V | 0.3121 | 0.3243 | 0.3111 | 0.3127 | PASS |

Front Position Lamp

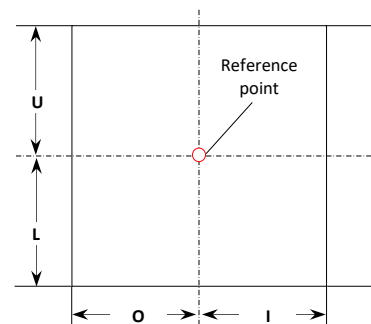


Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

3.3. Determination of the limits of the apparent surface according to paragraph 2.5.2 of ECE-R53

| Boundry | Front Position Lamp |
|-------------|---------------------|
| Upper (U) | 43.00 mm |
| Lower (L) | 43.00 mm |
| Outside (O) | 60.00 mm |
| Inside (I) | 150.00 mm |



Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

4. Communication

Concerning : APPROVAL GRANTED

of a type of device pursuant to Regulation No. 50

Approval No. 50R-01 0577 Extension No. 00

4.1. Concise description

- 4.1.1 By category of lamp : -
- Colour of light emitted : White
- Number, category and kind of light source(s) : 1 non replaceable light source (1 MD E24 0577-2 non repladceable LED Module and 52 non replaceable LEDs connected as 1 light source)
- Light source module : YES
- Light source module specific identification code : MD E24 0577-2
- Geometrical conditions of installation and relating variations, if any : reference axis parallel to the median longitudinal plane of the vehicle and parallel to the bearing plane of the vehicle on the road (see drawing).
- Application of an electronic light source control gear/variable intensity control : YES
- (a) being part of the lamp : YES
- (b) being not part of the lamp : NO
- Input voltage(s) supplied by an electronic light source control gear/variable intensity control : N/A
- Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body) : N/A

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

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

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

Front position lamp : NO

Rear position lamp : N/A

Stop lamp : N/A

Sequential activation of light sources : N/A

4.2. Position of the approval mark : On the Lens

4.3. Reason(s) for extension (if applicable) : N/A

Test Report No. : ISOQA-21-0234-R50

Approval No. : 50R-01 0577
Type : MS-F800HA
Manufacturer : Guangzhou MorSun Technology co.,Ltd

5. Appendices

- | | | | |
|----|---------------------------------|---|------------------|
| 1. | Appendix 1 Information document | 1 | page(s) in total |
| 2. | Appendix 2 Drawing | 2 | page(s) in total |

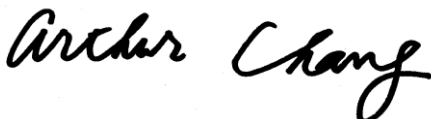
6. Statement of conformity

- 6.1 The information folder respectively information document by the manufacturer and the type described therein are in compliance with the Test Specification mentioned above.
- 6.2 The device is so designed and constructed that in normal use, and despite the vibrations to which they may be subjected, their satisfactory operation continues to be assured and they retain the characteristics prescribed by this Regulation.

ISOQA Technical Service Co., Ltd.

Place : Taichung, Taiwan Date : 2021/5/19

Signature



Laboratory Manager - Chih-Hua Chang

Guangzhou MorSun Technology co.,Ltd

Room 201, 2/F, No.10 Rongxi Industrial Street, Baiyun Lake
Street Baiyun District Guangzhou City Guangdong Province


TEL: 86-20-36089038

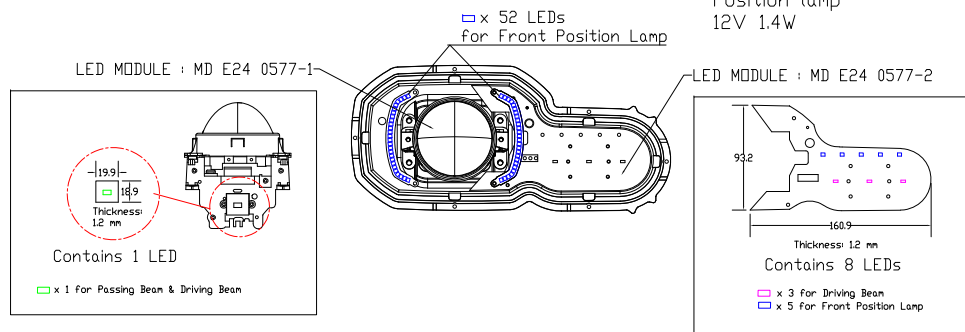
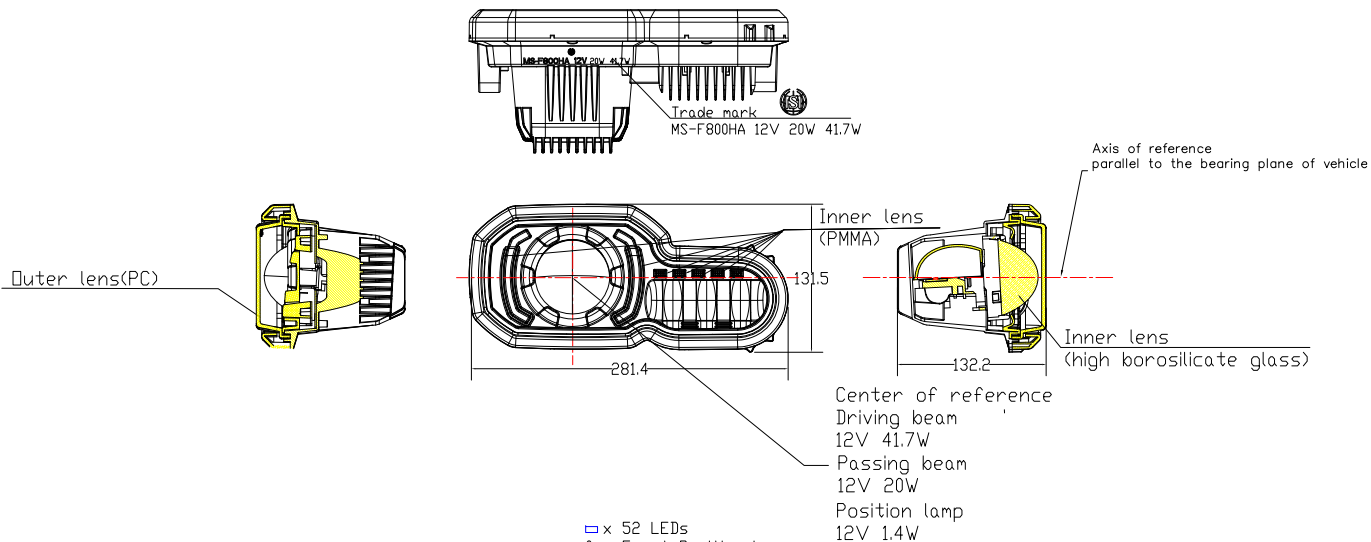
FAX: 86-20-36089038

INFORMATION

for Initial Application

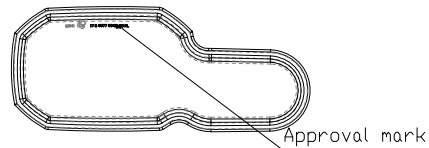
Date: 2021/3/30

| | | | |
|---------------------------------|---|--|--|
| Manufacturer's Name and Address | Guangzhou MorSun Technology co.,Ltd Room 201, 2/F, No.10 Rongxi Industrial Street, Baiyun Lake Street, Baiyun District, Guangzhou City, Guangdong Province 510000 P.R. China | | |
| Trade name or mark |  | | |
| Type Name | MS-F800HA | | |
| Material of Outer Lens(es) | Teijin Panlite L-1225Z 100 PC with GE UVHC3000 coating | | |
| Material of inner Lens(es) | Passing/Driving beam : Glass Front Position lamp : PMMA | | |
| Material of Housing | Aluminium alloy | | |
| Rate Voltage | 12 V | | |
| Rate Wattage | see below | | |
| Passing Beam (R113.03) | Category | C-BS | |
| | Class | Class B | |
| | Light Source | 1 x MD E24 0577-1, 12 V, 20W | |
| | Light Source Control Gear | part of the LED module and included into the lamp body | |
| | Color of light emitted | White | |
| | Color of inner lens | Clear | |
| | Color of outer lens | Clear | |
| Driving Beam (R113.03) | Category | R-BS | |
| | Class | Class B | |
| | Light Source | 1 x MD E24 0577-1 + 1 x MD E24 0577-2, 12 V, 41.7W | |
| | Light Source Control Gear | part of the LED module and included into the lamp body | |
| | Color of light emitted | White | |
| | Color of inner lens | Clear | |
| | Color of outer lens | Clear | |
| Front Position Lamp (R50.01) | Category | - | |
| | Light Source | 1 x LED Module + 52 LEDs, 12 V, 1.5W | |
| | | (if anyone LED fails, all LEDs fail) | |
| | Light Source Control Gear | part of the lamp and included into the lamp body | |
| | Color of light emitted | White | |
| | Color of outer lens | Clear | |
| | Color of Inner lens | Clear with pattern | |



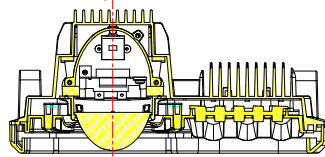
LIGHT SOURCES:

- Front Position Lamp:
- 52 Non-replaceable LEDs +
 - 5 LEDs of MD E24 0577-2
- Passing Beam:
- MD E24 0577-1
- Driving Beam
- MD E24 0577-1 +
 - 3 LEDs of MD E24 0577-2



Axis of reference
parallel to the median
longitudinal plane of vehicle

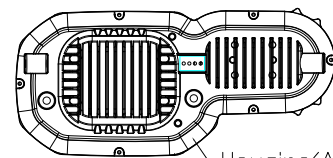
Driving Direction



50R-01



17.5 0577 03 CR-BS PI



unit : mm

| | |
|---------------------------------------|---|
| Guangzhou MorSun Technology Co., Ltd. | |
| Type Name : | MS-F800HA |
| Type description : | Front position Lamp / Driving Beam / Passing Beam |

