

This is a translation to English for reference purpose of JNCAP test method which is originally prescribed in Japanese language.
Please be sure to refer to the Japanese test method if you need to be precisely correct.

HIGH-PERFORMANCE HEADLAMP EQUIPMENT CHECKING METHOD

Created: March 20, 2018

Revised: March 23, 2022

1. Effective date

This equipment checking method will go into effect on April 1, 2018. However, the rules revised on March 23, 2022 shall come into effect as of April 1, 2022.

2. Scope of Application

This checking method applies exclusively to the passenger vehicles equipped with a High-performance headlamp device, with 9 occupants or less and commercial vehicles with a gross vehicle mass of 2.8 tons or less conducted by the National Agency for Automotive Safety and Victims' Aid (hereinafter referred to as "NASVA") in the new car, etc. assessment program information supply project.

3. Definition of Terms

The terms in this checking method shall be defined as follows.

- (1) '**High-performance headlamp**' refers to devices which possess either the 'automatic anti-glare type' or 'automatic switching type' function with the aim to automatically change the headlamp beam illumination range depending on the condition of traffic in front at night.
- (2) '**Automatic anti-glare type**' refers to the function which alters the light distribution of the driving beam (High beam) depending on the condition of traffic in front. (in cases where control of the High beam is based on the light emitted by the headlamp and front signaling equipment of on-coming vehicles, High beams that illuminate other than oncoming vehicles are limited to ones that are kept in operation).
- (3) '**Automatic switching type**' refers to the function which has the capability to automatically switch the High beam and the low beam.
- (4) '**Main driving beam (high beam)**' is the illuminating light ray of the front headlamps, for the purpose of checking for obstacles in the traffic path at night.
- (5) '**Passing beam (low beam)**' is the illuminating light ray of the front headlamps of which the illumination range has been altered by changing the optical axis and by partially blocking the light ray, in order to not disturb other traffic.
- (6) '**Operation speed**' refers to the driving velocity range at which the automatic switch to the low beam or the partial light ray blocking function operates (works) for each device.

4. Provision of data from automobile manufactures

Automobile manufacturers will provide to the organization either the data (Attached Table 1) and (following) documentation necessary for the confirmation of device function and operation speed of the vehicle undergoing the equipment check, or documentation that is the equivalent thereof.

- (1) Standard certified test result: Standard certified test results of the 'adaptive main-beam headlamps' (in cases where control of the main beam is based on the light emitted by the headlamp and front signaling equipment of on-coming vehicles, main beams that illuminate other than oncoming vehicles are limited to ones that are kept in operation), or 'automatic control of the main-beam headlamps' (as found in the UN ECE R48), that are applicable to the model of the car undergoing equipment check, or equivalent documents.
- (2) Instruction manual: Instruction manual (owner's manual) associated with the model of the car undergoing the equipment check, or other documentation equivalent to this.

5. Recording of results

5.1 High-performance headlamp function and equipment check

If, according to the Standard certified test result documentation, the authentication of the adaptive main-beam headlamps is confirmed, in the attached appendix 2 record 'yes' in the 'automatic anti-glare' column. If, according to the same documentation, the authentication of the 'automatic control of the main-beam headlamps' is confirmed, in the attached appendix 2 record 'yes' in the 'automatic switching type' column. For devices that fall outside of this category, record 'no' in the columns for each device type.

5.2 Checks of operation speed

In the event that 'yes' was recorded for the device as referred in Section 5.1, in Attached Table 2, record the operation speed stated in the corresponding device's instruction manual in the column marked 'speed range'.

**APPENDIX 1 - SPECIFICATION TABLE FOR HIGH-PERFORMANCE HEADLAMP EQUIPMENT
CHECK**

[To be filled out by the Vehicle manufacturer, etc]

1. Specifications of the car being examined

(1) Make/Type (Model name): _____ / _____ (_____)

2. Declaration from the Car Manufacturer

● 'Automatic anti-glare type':

Yes (Operating speed: _____ km/h ~ _____ km/h) / No

● 'Automatic switching type'

Yes (Operating speed: _____ km/h ~ _____ km/h) / No

3. Attached documents

● Function and equipment documents: R48 certified test results / Other: _____

● Operation speed documents: Instruction manual / Other: _____

APPENDIX 2 – HIGH-PERFORMANCE LAMP CHECK RESULT

【To be filled out by the organization performing the check】

Date of check (YYYY/MM/DD) : _____

1. Specifications of automobile undergoing performance check

(1) Make/ Type (Model name): _____ / _____ (_____)

2. Result of equipment check

		'Automatic anti-glare type'	'Automatic switching type'
Equipment	Yes or no	Yes · No	Yes · No
	Supporting documents	(corresponding)	(corresponding)
Operation speed	Speed range	km/h ~ km/h	km/h ~ km/h
	Supporting documents	(corresponding)	(corresponding)

[Notes]