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Item 4.9.10 of the provisional agenda

**1958 Agreement – Consideration of draft amendments
to existing Regulations submitted by GRE****Proposal for Supplement 3 to the 01 series of amendments to
Regulation No. 112 (Headlamps emitting an asymmetrical
passing beam)****Submitted by the Working Party on Lighting and Light-Signalling ***

The text reproduced below was adopted by the Working Party on Lighting and Light-Signalling (GRE) at its sixty-sixth session in order to clarify the heat test requirements, to correct the UV radiation requirements of LED modules and clarify that they are of the "low UV" type, to amend the conformity of production requirements, to amend the photometric requirements in the case of a LED module operating with electronic control gear, revise the definition of "LED Modules" and correct an editorial error in the 01 series of amendments. It is based on ECE/TRANS/WP.29/GRE/2011/39, as amended by paragraph 20 of the report, ECE/TRANS/WP.29/GRE/2011/52, not amended, ECE/TRANS/WP.29/GRE/2011/45, not amended, ECE/TRANS/WP.29/GRE/2011/54, not amended, ECE/TRANS/WP.29/GRE/2011/55, not amended, and ECE/TRANS/WP.29/GRE/2011/64, not amended (ECE/TRANS/WP.29/GRE/66, paras. 20, 27 and 37). It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee (AC.1) for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

Paragraph 5.7.2., amend to read:

"5.7.2. In the case ... according to paragraph 6.2.4.; in addition ..."

Insert a new paragraph 5.11., to read:

"5.11. An LED module shall be:

- (a) Only removable from its device with the use of tools, unless it is stated in the communication sheet that the LED module is non replaceable, and
- (b) So designed that regardless of the use of tool(s), it is not mechanically interchangeable with any replaceable approved light source."

Paragraph 6.2.4., the table, amend to read:

"

<i>Headlamps for RH Traffic**</i>		<i>Class A Headlamp</i>		<i>Class B Headlamp</i>	
<i>Test Point Designation</i>	<i>Test Point Angular Coordinates - Degrees</i>	<i>Required luminous intensity (cd)</i>		<i>Required luminous intensity (cd)</i>	
		<i>Max</i>	<i>Min</i>	<i>Max</i>	<i>Min</i>
50 L	0.86D, 3.43L	13200***		13200***	

* Actual measured value at points 50R / 50L respectively

** For left-hand traffic, the letter R shall be replaced by letter L and vice versa.

*** In case where a headlamp in which LED modules are producing a passing beam in conjunction with an electronic light source control gear, the measured value shall not be more than 18500 cd"

Insert a new paragraph 10.7., to read:

"10.7. The measuring points 1 to 8 from paragraph 6.2.4. of this Regulation are disregarded."

Annex 4, paragraphs 2.2.1. to 2.2.2, amend to read:

"2.2.1. The result expressed in milliradians (mrad) shall be considered as acceptable for a passing beam headlamp when the absolute value $\Delta r_1 = | r_3 - r_{60} |$ recorded on the headlamp is not more than 1.0 mrad ($\Delta r_1 \leq 1.0$ mrad) upward and not more than 2.0 mrad ($\Delta r_1 \leq 2.0$ mrad) downwards.

2.2.2. However, if this value is:

<i>movement</i>	
upward	more than 1.0 mrad but not more than 1.5 mrad ($1.0 \text{ mrad} < \Delta r_1 \leq 1.5 \text{ mrad}$)
downward	more than 2.0 mrad but not more than 3.0 mrad ($2.0 \text{ mrad} < \Delta r_1 \leq 3.0 \text{ mrad}$)

a further sample of a headlamp shall be tested as described in paragraph 2.1. after being subjected three consecutive times to the cycle as described below,

in order to stabilize the position of mechanical parts of the headlamp on a base representative of the correct installation on the vehicle:

Operation of the passing beam for one hour, (the voltage shall be adjusted as specified in paragraph 1.1.1.2.),

After this period of one hour, the headlamp type shall be considered as acceptable if the absolute value Δr measured on this sample meets the requirements in paragraph 2.2.1. above."

Annex 10, paragraph 4.2., amend to read:

"4.2. UV-radiation

The UV-radiation of a low-UV-type LED module shall be such ...

This value shall be calculated using intervals of one nanometre. The UV-radiation shall be weighted according to the values as indicated in the Table UV below:

Table UV

Values according to "IRPA/INIRC Guidelines on limits of exposure to ultraviolet radiation". Wavelengths (in nanometres) chosen are representative; other values should be interpolated.

λ	$S(\lambda)$	λ	$S(\lambda)$	λ	$S(\lambda)$
250	0.430	305	0.060	355	0.000 16
255	0.520	310	0.015	360	0.000 13
260	0.650	315	0.003	365	0.000 11
265	0.810	320	0.001	370	0.000 09
270	1.000	325	0.000 50	375	0.000 077
275	0.960	330	0.000 41	380	0.000 064
280	0.880	335	0.000 34	385	0.000 053
285	0.770	340	0.000 28	390	0.000 044
290	0.640	345	0.000 24	395	0.000 036
295	0.540	350	0.000 20	400	0.000 030
300	0.300				