ENLIGHT Consensus — Round 1

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Thank you for your participation in the ENLIGHT consensus exercise. We are very enthusiastic about this project and look forward to working with you.

Please read the information and questions in this survey carefully.

About this survey

We are interested in defining best practices for *documenting and reporting light interventions in laboratory-based research conducted in human participants*, with a specific focus on research on the effects of ocular light exposure on non-visual physiology.

This survey should take no more than 30 minutes to complete. You can follow your progress in the top right corner.

After asking a series of demographic questions, you will be asked to make ratings on the *importance* of various reporting items related to *light interventions*. Please make every rating *independently*.

In this round, we are asking for your judgment on the importance. In the next round(s), we will specifically focus on how (i.e. the format) that specific things should be reported in. Please keep this in mind as you are answering the questions.

Questions and comments?

If you have any questions throughout the survey, please feel free to reach out to any member of the ENLIGHT team, or our general email adderss at enlight@lightcat.group.

If you find that some ratings are difficult to do, please include this in the comments box for each section.

Please enter your **unique 5-character survey code**. This code was sent to you in the email with the survey link. The form of the code is Nxxxx, where xxxx are four numbers (e.g. N3039). * Required

Your answer should be no more than 5 characters long.	

Information about you

First, we would like to learn a little bit more about you. This helps us monitor the diversity of our responders. Please answer the following demographic questions truthfully.

What is your sex? * Required

C Male
C Female
C Prefer not to say
Is the gender you identify with the same as your sex registered at birth? * Required
C Yes C No Prefer not to say
If "No", please write in your gender identity.
Do you have a PhD or another research-based doctoral degree? * Required
C Yes C No
What year did you receive your (first) PhD or other research-based doctoral degree?
What is your main role? * Required
 Principal Investigator Postdoc Doctoral student Master's student Research assistant Other
If you selected Other, please specify:

What model organism are you working with? If you're work does not involve working with subjects, please don't select any answer and/or include it in the "Other" category. * Required
☐ Human☐ Mouse☐ Other
If you selected Other, please specify:
In which country/countries do you currently live and work? We ask this to understand the diversity of the responders. If you identify to work in multiple countries, please separate them by a semicolon. *Required
Which discipline(s) do you identify to work in? (E.g. neuroscience, lighting science,). If you identify to work in multiple disciplines, please separate them by a semicolon. *Required
How would you rate your knowledge of measuring light interventions? **Required
C Very poor C Poor C Average C Above average C High
How would you rate your knowledge of documenting light interventions? **Required
C Very poor C Poor C Average C Above average C High

Reporting of protocol-level characteristics

What is the importance of the following **protocol-level** aspects of light interventions?

Please don't select more than 1 answer(s) per row.

Please select at least 2 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Timeline of laboratory experiment	Г	Г	Г	Г	Г	Г	Г	П
Overall duration of the laboratory experiment	Г	Г	Г	Г	Г	Г	Г	Г
Timing of light intervention (in clock time)	Г	Г	Г	Г	Г	Г	Г	Г
Duration of the light intervention (in min or h)	Г	Г	Г	Г	Г	Г	Г	Г
Inclusion of dim light exposure prior to intervention	Г	Г	Г	Г	Г	Г	Г	Г
Control of prior (before entering the laboratory) light exposure	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other **protocol-level characteristics** that should be reported?

Please add any further comments on this section.	

Reporting of light characteristics

What is the importance of the following spectral characteristics for characterising light interventions?	* Required
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Please don't select more than 1 answer(s) per row.

Please select at least 4 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Spectral radiance distribution (in W/sr/m2/nm)	Г	Г	Г	Г	Г	Г	Г	Г
Spectral irradiance distribution (in W/m2/nm)	Г	Г	Г	Г	Г	Г	Г	Г
Spectral power distribution (normalised)	Г	Г	Г	Г	Г	Г	Г	Г
Spectral power distribution (arbitrary units)	Г	Г	Г	Г	Г	Г	Г	Г
Peak wavelength (in nm)	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other spectral characteristics that should be reported?	

Please add any further comments on this section.

What is the importance of the following photometric quantities for characterising light interventions?

Please don't select more than 1 answer(s) per row.

Please select at least 3 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Illuminance (in lux)	Г	Г	Г	Г	Г	Г	Г	Г
Luminance (in cd/m2)	Г	Г	Г	Г	Г	Г	Г	Г
Retinal illuminance (in Trolands)	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other **photometric quantities** that should be reported?

Please add any further comments on this section.	

What is the importance of the following **CIE S026 quantities** for characterising light interventions? Note: α -opic refers to **all** photoreceptors in the human retina (LMS cones, rods, ipRGCs).

Please don't select more than 1 answer(s) per row.

Please select at least 6 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
α-opic irradiance	Г	Г	Г	Г	Г	Г	Г	Г

α-opic radiance	Г	Г	Г	Г	Г	Г	Г	Г
α-opic efficacy of luminous radiation (α- opic ELR)	Г	Г	Г	Г	Г	Г	Г	Г
α-opic equivalent daylight (D65) illuminance (α-opic EDI)	Г	Г	Г	Г	Г	Г	Г	Г
α-opic equivalent daylight (D65) luminance (α-opic EDL)	Г	Г	Г	Г	Г	Г	Г	Г
α-opic daylight (D65) efficacy ratio (α-opic DER)	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other CIE S026 quantities that should be reported?

Please add any further comments on this section.	

What is the importance of the following CIE S026 melanopic quantities for characterising light interventions?

Please don't select more than 1 answer(s) per row.

Please select at least 6 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important	
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melanopic irradiance	Г	Г	Г	Г	Г	Г	Г	П
melanopic radiance	Г	Г	Г	Г	Г	Г	Г	Г
melanopic efficacy of luminous radiation (melanopic ELR)	Г	Г	Г	Г	Г	Г	Г	Г
melanopic equivalent daylight (D65) illuminance (melanopic EDI)	Г	Г	Г	Г	Г	Г	Г	Г
melanopic equivalent daylight (D65) luminance (melanopic EDL)	Г	Г	Г	Г	Г	Г	Г	Г
melanopic daylight (D65) efficacy ratio (melanopic DER)	Г	Г	Г	Γ	Г	Г	Г	Γ

Are there any other **melanopic quantities** that should be reported?

Please add any further comments on this section.	

How important is it to report the following **colour quantities** for characterising light interventions?

Please don't select more than 1 answer(s) per row.

Please select at least 6 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
CIE 1931 XYZ (tristimulus coordinates)	Г	Г	Г	Г	Г	Г	Г	Г
CIE 1964 XYZ (tristimulus coordinates)	Г	Г	Г	Г	Г	Г	Г	Г
CIE 1931 xy (chromaticity)	Г	Г	Г	Г	Г	Г	Г	Г
CIE 1964 xy (chromaticity)	Г	Г	Г	Г	Г	Г	Г	Г
CIE 1976 u'v'	Г	Г	Г	Г	Г	Г	Г	Г
correlated colour temperature (CCT)	Г	Г	Г	Г	Г	Г	Г	Г
Duv	Г	Г	Г	Г	Г	Г		П

Are there any other colour qu	ıantities that s	should be r	eported?
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Please add any further comments on this section.	

How important is it to report the following colour rendition metrics for characterising light interventions?

Please don't select more than 1 answer(s) per row.

Please select at least 3 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Ra (Colour Rendering Index = CRI; CIE 13.3:1995)	Г	Г	Г	Г	Г	Г	Г	Г
Rf (Colour Fidelity Index; IES TM-30-15, CIE 224:2017)	Г	Г	Г	Г	Г	Г	Г	Г
Rg (Colour Gamut Score; IES TM-30-15, CIE 224:2017)	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other colour rendition metrics that sh	nould be reported?
Please add any further comments on this section.	

How important is it to report the following **source-level characteristics** for characterising light interventions?

Please don't select more than 1 answer(s) per row.

Please select at least 1 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Types of light sources (display, overhead illumination,)	Г	Г	Г	Г	Г	Г	Г	Γ
Manufacturer of light sources	Г	Г	Г	Г	Г	Г	Г	Г
Make of light sources	Г	Г	Г	Г	Г	Г	Г	Г
Manufacturer- supplied characteristics (CCT, spectrum,)	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other source-level characteristics t	hat should be reported?
Please add any further comments on this section.	

How important is it to report the following measurement-level characteristics for characterising light interventions?

Please don't select more than 1 answer(s) per row.

Please select at least 1 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Description of how measurements were taken	Г	Г	Г	Г	Г	Г	Г	Г
Plane of measurements	Г	Г	Г	Г	Г	Г	Г	Г
Location of measurements	Г	Г	Г	Г	Г	Г	Г	Г
Viewpoint of measurements	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other measurement-level character	istics that should be reported?
Please add any further comments on this section.	

How important is it to report th	a fallowing inatrument laval	abaraatariatiaa f	or oborootoricina	light intoniontions?
now imponants into report in	e lollowing instrument-level	CHAIACIEUSIICS	or characiensino	non mervenions/

Please don't select more than 1 answer(s) per row.

Please select at least 3 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Manufacturer/brand	Г	Г	Г	Г	Г	Г	Г	Г
Make	Г	Г	Г	Г	Г	Г	Г	Г
Serial number	Г	Г	Г		Г	Г	Г	Г
Calibration status	Г	Г	Г	Г	Г	Г		Г
Calibration year	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other in	strument-level	characteristi	cs that should	be reported?		
Please add any furthe	r comments on	this section.				

How important is it to report the following **spatial characteristics** for characterising light interventions?

Please don't select more than 1 answer(s) per row.

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Viewing distance	Г	Г	Г	Г	Г	Г	Г	Г
Location of stimulus	Г	Г	Г	Г	Г	Г	Г	Г
Absolute size of stimulus (e.g. in mm)	Г	Г	Г	Г	Г	Г	Г	Г
Relative size of stimulus (e.g. angular extent in degrees from a specific viewpoint)	Г	Г	Γ	Γ	Г	Г	Г	Г
Natural- language descriptors of spatial configuration	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other **spatial characteristics** that should be reported?

Please add any further comments on this section.	

How important is it to report the following **temporal characteristics** for characterising light interventions? Note: This question concerns the acute stimulus.

Please don't select more than 1 answer(s) per row.

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Temporal pattern	Г	Г	Г	Г	Г	Г	Г	Г
Waveform (e.g. square wave, sine wave)	Г	Г	Г	Г	Г	Г	Г	Г
Flicker frequency	Г	Г	Г	Г	Г	П	Г	Г

Flicker frequency	Г	Г	Г	Г	Г	Г	Г	Г
Are there any ot	ther temporal c	haracteristics	that should be	e reported?				
Please add any	further comme	nts on this sect	ion.					

Reporting of setting-level characteristics

How important is it to report the following experimental setting-level aspects?
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Please don't select more than 1 answer(s) per row.

Please select at least 2 answer(s).

	X – Don't know or recognise this quantity/item and cannot evaluate	1 – Very unimportant	2 – Quite unimportant	3 – Unimportant	4 – Neither unimportant nor important	5 – Important	6 – Quite important	7 – Very important
Description of experimental setting	Г	Г	Г	Г	Г	Г	Г	Г
Room geometry (including size)	Г	Г	Г	Г	Г	Г	Г	Г
Photograph of experimental setting	Г	Г	Г	Г	Г	Г	Г	Г
Drawing of experimental setting	Г	Г	Г	Г	Г	Г	Г	Г

Are there any other setting-level characteristics that should be reported?	
Please add any further comments on this section.	

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Do you have any general comments?	

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Many thanks for participating in this survey. We appreciate your time and effort.

We will be in touch soon with the next steps.

Have a nice day!