

Light is OSRAM

15.07.2021

OS-IN-2021-019

Harmonization of Data Sheet Brightness Group Table for Horticulture Application Color Devices

Objective	Update of Brightness Group Table in the Data Sheet																																																																					
Products affected	GH CSSRM4.24			GF CSSPM1.24			GP JTLPS1.14																																																															
	GD CSSRM2.14			GF CSHPM1.24			GP PSLM31.14																																																															
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Background	Introduce Photon Flux (PF) which takes all photons emitted by LED light source to replace Biological Photon Flux (BPF).																																																																					
	<u>Current Data Sheet (example for GH CSSRM4.14):</u>																																																																					
Realization	<table border="1"> <thead> <tr> <th rowspan="3">Group</th> <th colspan="2">Total radiant flux ¹⁾</th> <th colspan="2">PPF *</th> <th>PPF/W *</th> <th colspan="3">BPF **</th> </tr> <tr> <th>min.</th> <th>max.</th> <th>min.</th> <th>max.</th> <th>typ.</th> <th>min.</th> <th>max.</th> <th>typ.</th> </tr> <tr> <th>Φ_E</th> <th>Φ_E</th> <th>Φ_p</th> <th>Φ_p</th> <th></th> <th>$\Phi_{p,b}$</th> <th>$\Phi_{p,b}$</th> <th></th> </tr> </thead> <tbody> <tr> <td>V6</td> <td>960 mW</td> <td>995 mW</td> <td>5.24 $\mu\text{mol/s}$</td> <td>5.44 $\mu\text{mol/s}$</td> <td>3.81 $\mu\text{mol/J}$</td> <td>5.27 $\mu\text{mol/s}$</td> <td>5.46 $\mu\text{mol/s}$</td> <td>3.83 $\mu\text{mol/J}$</td> </tr> <tr> <td>V7</td> <td>995 mW</td> <td>1035 mW</td> <td>5.44 $\mu\text{mol/s}$</td> <td>5.65 $\mu\text{mol/s}$</td> <td>3.96 $\mu\text{mol/J}$</td> <td>5.46 $\mu\text{mol/s}$</td> <td>5.68 $\mu\text{mol/s}$</td> <td>3.98 $\mu\text{mol/J}$</td> </tr> <tr> <td>V8</td> <td>1035 mW</td> <td>1075 mW</td> <td>5.65 $\mu\text{mol/s}$</td> <td>5.87 $\mu\text{mol/s}$</td> <td>4.11 $\mu\text{mol/J}$</td> <td>5.68 $\mu\text{mol/s}$</td> <td>5.90 $\mu\text{mol/s}$</td> <td>4.14 $\mu\text{mol/J}$</td> </tr> <tr> <td>V9</td> <td>1075 mW</td> <td>1120 mW</td> <td>5.87 $\mu\text{mol/s}$</td> <td>6.12 $\mu\text{mol/s}$</td> <td>4.28 $\mu\text{mol/J}$</td> <td>5.90 $\mu\text{mol/s}$</td> <td>6.15 $\mu\text{mol/s}$</td> <td>4.30 $\mu\text{mol/J}$</td> </tr> </tbody> </table>									Group	Total radiant flux ¹⁾		PPF *		PPF/W *	BPF **			min.	max.	min.	max.	typ.	min.	max.	typ.	Φ_E	Φ_E	Φ_p	Φ_p		$\Phi_{p,b}$	$\Phi_{p,b}$		V6	960 mW	995 mW	5.24 $\mu\text{mol/s}$	5.44 $\mu\text{mol/s}$	3.81 $\mu\text{mol/J}$	5.27 $\mu\text{mol/s}$	5.46 $\mu\text{mol/s}$	3.83 $\mu\text{mol/J}$	V7	995 mW	1035 mW	5.44 $\mu\text{mol/s}$	5.65 $\mu\text{mol/s}$	3.96 $\mu\text{mol/J}$	5.46 $\mu\text{mol/s}$	5.68 $\mu\text{mol/s}$	3.98 $\mu\text{mol/J}$	V8	1035 mW	1075 mW	5.65 $\mu\text{mol/s}$	5.87 $\mu\text{mol/s}$	4.11 $\mu\text{mol/J}$	5.68 $\mu\text{mol/s}$	5.90 $\mu\text{mol/s}$	4.14 $\mu\text{mol/J}$	V9	1075 mW	1120 mW	5.87 $\mu\text{mol/s}$	6.12 $\mu\text{mol/s}$	4.28 $\mu\text{mol/J}$	5.90 $\mu\text{mol/s}$	6.15 $\mu\text{mol/s}$	4.30 $\mu\text{mol/J}$
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Note: [1] Includes wavelengths between 400 and 700 nm

Note: [2] Includes wavelengths between 280 and 800 nm

New Data Sheet (example for GH CSSRM4.14):**Brightness Groups**

Group	Total radiant flux ¹⁾	Total radiant flux ¹⁾	PPF *	PPF *	PPF/W *	PF **	PF **	PF/W **
	$I_F = 700 \text{ mA}$ min. Φ_E	$I_F = 700 \text{ mA}$ max. Φ_E	min. Φ_p	max. Φ_p	typ.	min. $\Phi_{p,b}$	max. $\Phi_{p,b}$	typ.
V6	960 mW	995 mW	5.24 $\mu\text{mol/s}$	5.44 $\mu\text{mol/s}$	3.81 $\mu\text{mol/J}$	5.27 $\mu\text{mol/s}$	5.46 $\mu\text{mol/s}$	3.83 $\mu\text{mol/J}$
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Note: [*] Photosynthetic Photon Flux includes wavelengths between 400 and 700 nm

Note: [**] Photon Flux includes wavelengths between 280 and 800 nm

Note: PPF and PF values are for reference only

Time Schedule

Target completion of datasheets update: end of August-2021

Assessment

Product datasheets will be updated progressively and be available on OSRAM OS homepage. No change in fit, form, function and reliability of the devices.

Please direct your inquiry to your local Sales office.

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