



Task 8 SSL Annex Database update

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29 November 2022, zoom meeting

Overview

- Third term plan
- Database status
- Follow up on last plan
- EPREL data
- Expert input and discussion

Third term plan and status

- Making a common structure and storage for data and file sharing that is as useful for us to save and analyse data

Task 8. SSL Annex Product Database																				
Task Leader: Carsten Dam-Hansen, Denmark																				
Objectives	To maintain and expand an internal benchmarking database of SSL products to enable countries to share performance data and test results for LED lamps and LED luminaire modules. This database would be used internally by SSL Annex member countries, used in public reports if it is presented as anonymous data (i.e., does not identify brands). The database will be populated with test data provided on a voluntary basis from member countries, and/or may also include other sources of data if deemed appropriate by the Leader.																			
	FY1 (2019–20)				FY2 (2020–21)				FY3 (2021–22)				FY4 (2022–23)				FY5 (2023–24)			
	MAM	JJA	SON	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON	DJF

- Database structure done and documentation available.
- Excel database files with identical structure

Lighting facts, DLC, Der LichtPeter TLM

DTU TLM measurements, **Longterm testing, LM-84 and EU endurance**

SEA data, 2019, SPD data

EPREL data

SEA 2020, EU endurance

Australia (35 models, average of results) TLM, EU endurance

Follow up on last plan

- Import SEA data for EU endurance testing (coll. with Christofer) Paused due to lost link to Christofer and Jonas, Are a replacement ready?
- Import SEA data + TLM for all years available (coll. with Christofer)
- Import Australian data (coll. with Steve/Gillian) Paused
- Find new storage for the data (sharepoint and excel not a good solution as it grows)
Possible to setup SQL database using Microsoft access, using the defined structure, initiated but time consuming
- Follow the development of new photometric data format (xml)
Ongoing, Christofer proposed using data from Light inspector setups
- Make analysis and short report on longterm testing, EU endurance
Requires the endurance data available at SEA and Australia
- Make analysis and short report on PstLM and SVM
Failed to use the structure for smart lamps testing, where it could have been used

EPREL data

- Access to EPREL data?
- Download from March 2021, 198687 entries
- Public data part (fully accessible from May 2022)
- Compliance data part - includes confidential technical information only accessible to market surveillance authorities,
- feature to extract and download data in CSV format for analysis or research planned , but not yet available (or is it?)
- developers are working on a form to request API keys, for massive access, but in the meantime you may get a temporary key for making some tests. (did we?)
- Assistance from MIRALLES Oscar and MOT Carmen-Alina

Pages / ... / v1.0.14

06 - Product groups' filtering parameters (v1.0.14)

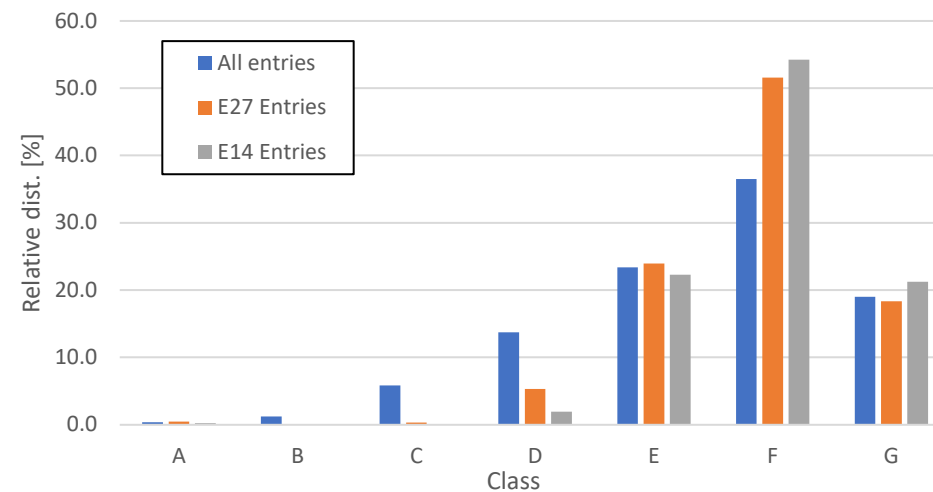
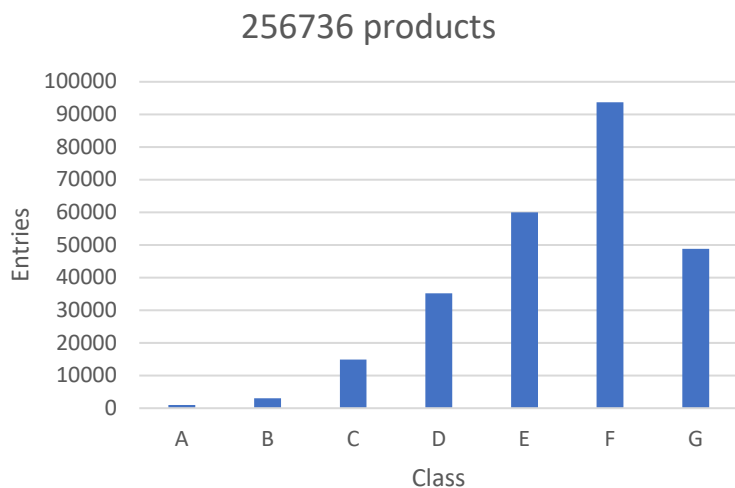
Created by Oscar MIRALLES, last modified on Mar 24, 2022

- Basic search
- Advanced search
- Examples
 - Domestic ovens
 - Electronic displays
 - Household washing machines 2019
 - Household washer-dryers 2019
 - Household dishwashers 2019
 - Refrigerating appliances 2019
 - Refrigerating appliances with direct sales function
 - Light sources

EPREL data

29-11-2022 Light sources (256 512)

Class	All entries		E27 Entries		E14 Entries	
	Entries	[%]	Entries	[%]	Entries	[%]
A	1001	0,4	106	0,4	30	0,2
B	3098	1,2	15	0,1	0	0,0
C	14943	5,8	78	0,3	9	0,1
D	35197	13,7	1264	5,3	236	1,9
E	59971	23,4	5705	24,0	2729	22,3
F	93701	36,5	12279	51,5	6643	54,2
G	48825	19,0	4373	18,4	2603	21,2
	256736	100,0	23820	100,0	12250	100



Examples E14 class A

Ultra Led
F35 F 4W E14 3000K

General information

A TYPE OF LIGHT SOURCE

Lighting technology used	LED
Non-directional or directional	Non-directional
Light source cap-type (or other electric interface)	E14
Mains or non-mains	Non-mains
Connected light source (CLS)	No
Colour-tuneable light source	No
High luminance light source	No
Anti-glare shield	No
Dimmable	No

470lm/4W = 118lm/W

GENERAL INFORMATION

Energy consumption in on-mode	4 kWh/1000h
Useful luminous flux	470 lm
Beam angle correspondence	Sphere (360°)
Correlated colour temperature	3 000 K
On-mode power	4,0 W
Standby power	0,00 W
Colour rendering index	80
Outer dimensions	120(Height) x 35(Width) x 35(Depth) mm
Claim of equivalent power	No
Chromaticity coordinate	x: 0,447 y: 0,407
Spectral power distribution in the range 250 nm to 800 nm, at full-load	Image

PARAMETERS FOR LED AND OLED LIGHT SOURCES

R9 Colour rendering index	-
Survival factor	-
Lumen maintenance factor	-

ENERGY LABEL

Ultra Led
F35 F 4W E14 3000K

A ?

4 kWh/1000h

Download the label for printing

Big color Big B&W
Small color Small B&W

Download the label in high resolution formats

Big color Big B&W
Small color Small B&W

Only the PDF version is suitable for printing with the correct colour codes

PHILIPS
9290034808A

A TYPE OF LIGHT SOURCE

Lighting technology used	LED
Non-directional or directional	Non-directional
Light source cap-type (or other electric interface)	E14
Mains or non-mains	Mains
Connected light source (CLS)	No
Colour-tuneable light source	No
High luminance light source	No
Anti-glare shield	No
Dimmable	No

485lm/2.3W = 211lm/W

Energy consumption in on-mode	3 kWh/1000h
Useful luminous flux	485 lm
Beam angle correspondence	Sphere (360°)
Correlated colour temperature	3 000 K
On-mode power	2,3 W
Standby power	0,00 W
Colour rendering index	80
Outer dimensions	125(Height) x 35(Width) x 35(Depth) mm
Claim of equivalent power	Yes
Equivalent power	40 W
Chromaticity coordinate	x: 0,444 y: 0,424
Spectral power distribution in the range 250 nm to 800 nm, at full-load	Image

PARAMETERS FOR LED AND OLED LIGHT SOURCES

R9 Colour rendering index	-
Survival factor	0,90
Lumen maintenance factor	0,96

PARAMETERS FOR LED AND OLED MAINS LIGHT SOURCES

Displacement factor	0,50
Colour consistency in McAdam ellipses	6
Claims that an LED light source replaces a fluorescent light source without integrated ballast of a particular wattage	No
Flicker metric	1,0
Stroboscopic effect metric	0,4

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A

3 kWh/1000h

Download the label for printing

Big color Big B&W
Small color Small B&W

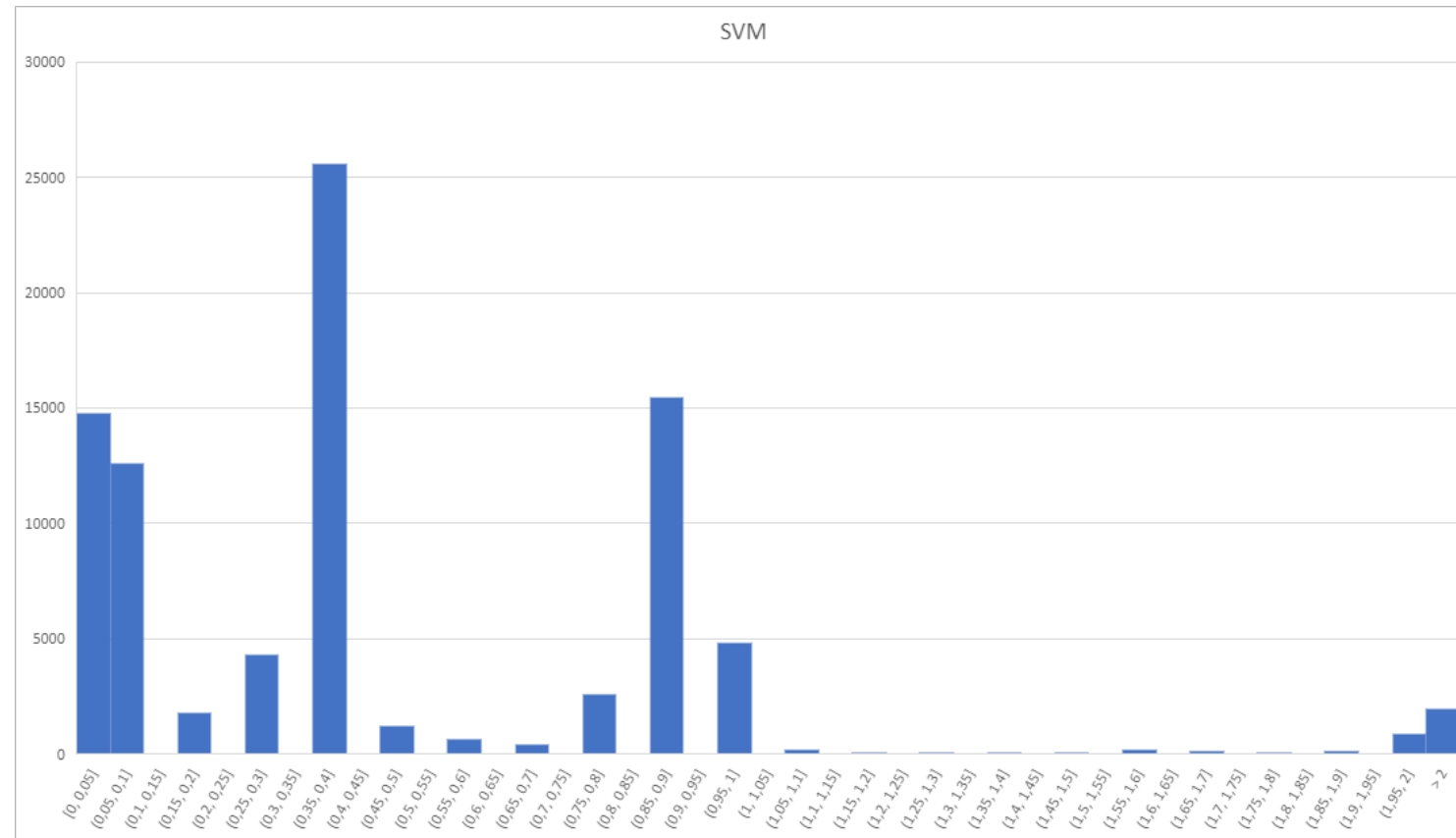
Download the label in high resolution formats

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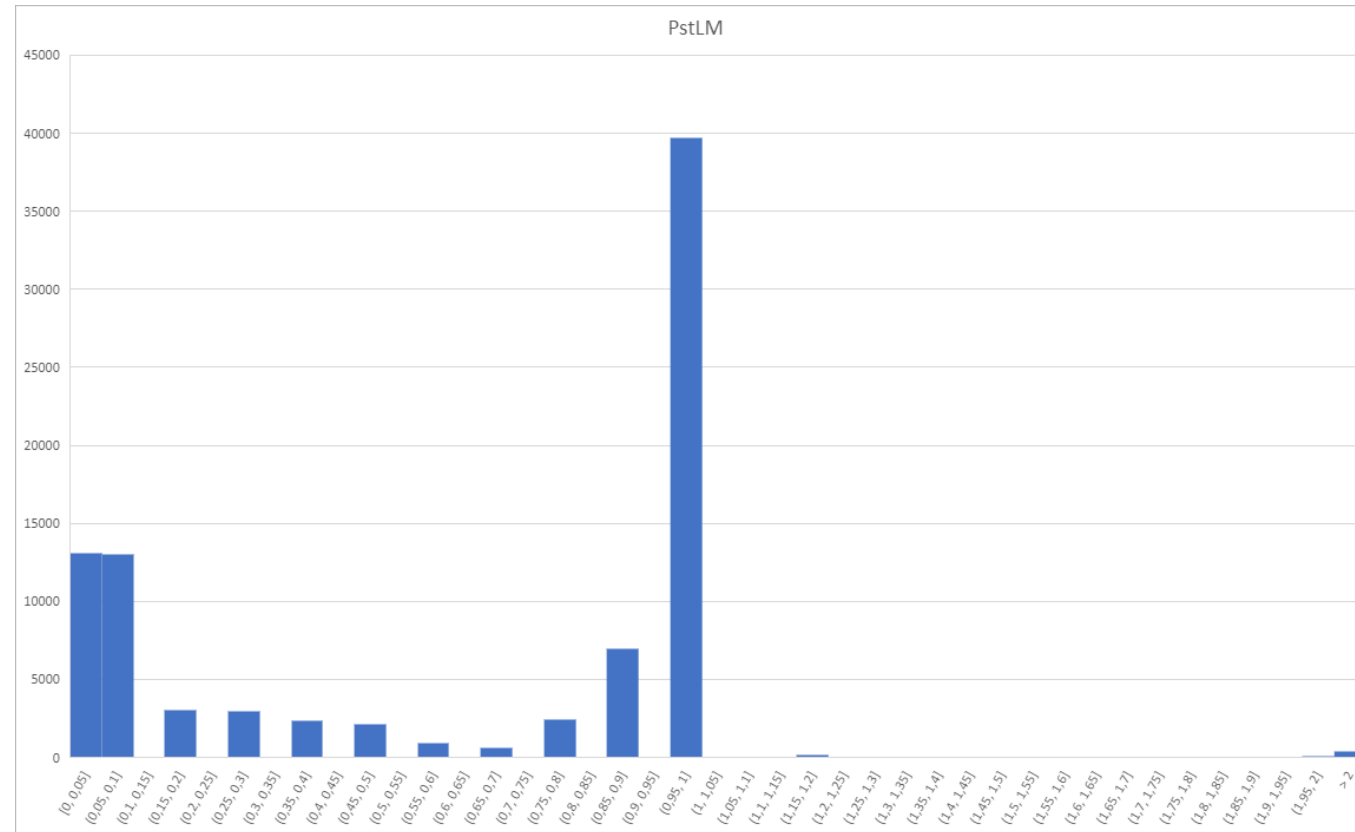
TLM parameters given

SVM < 0.9, (SVM < 0.4 from September 2024)



TLM parameters given

PstLM < 1



API search filtering parameters

Key	Field	Type	Length/Range	Format	Default	Unit	Delegated act point Fiche	Delegated point Label	act	Observations
Basic search										
modelIdentifier	Supplier's model identifier	Text	255							
supplierOrTrademark	Supplier's name or trademark	Text	255							
includeOldProducts	Include models not placed on the market anymore	Checkbox	TRUE/FALSE		FALSE					If FALSE then only show models with no END date of placement or not reach yet. If TRUE then show all
energyClass	Energy Efficiency Class	List	A - G				Annex V Table 3	Annex III 1.3(VI)		List of classes (Annex II Table 1) A, B, C, D, E, F, G
Advanced search										
luminousFluxMin luminousFluxMax	Useful luminous flux	Number (No decimals)	1 - 99999	#####		lm	Annex V Table 3			In fiche will be shown together with beam angle: [value] in [Sphere (360°)/Wide cone (120°)/Narrow cone (90°)]
capType	Light source cap-type (or other electric interface)	Text	255				Annex V Table 3			Free text to be used when user selects OTHER on advanced search dropdown. Search is done in capType values that "contains" this free text. OTHER: search any other text not in previous options.
capTypeOption	Light source cap-type (or other electric interface)	List	E27, E14, G13, G9, R7, OTHER				Annex V Table 3			List of options that look in free text: Omnibus amendment E27: search text E27 E14: search text E14 G13: search text G13 G9: search text G9 R7: search text R7 OTHER: search any other text not in previous options.
directional	Non-directional or directional	List	NDLS, DLS				Annex V Table 3			NDLS = Non-directional DLS = Directional
energyConsOnModeMin energyConsOnModeMax	Energy consumption in on-mode	Number (No decimals)	1 - 99999	#####		KWh/1000h	Annex V Table 3	Annex III 1.3(IV)		
dimmable	Dimmable	List	YES, NO, SPECIFIC				Annex V Table 3			List of dimmable: YES = Yes NO = No SPECIFIC = Only with specific dimmers
colourTuneable	Colour-tuneable light source	Boolean	Yes/No				Annex V Table 3			Yes = TRUE No = FALSE
lightingTechnology	Lighting technology used	List	HL, LFL_T5_HE, LFL_T5_HO, CFLNI, OTHER_FL, HPS, MH, OTHER_HID, LED, OLED, MIXED, OTHER				Annex V Table 3			List of technologies (Annex V Table 3): HL = HL LFL T5 HE = LFL_T5_HE LFL T5 HO = LFL_T5_HO CFLni = CFLNI other FL = OTHER_FL HPS = HPS MH = MH other HID = OTHER_HID LED = LED OLED = OLED mixed = MIXED other = OTHER

Plan and Round the table

Plan for next period:

- Import SEA data for EU endurance testing
- Import SEA data + TLM for all years available
- Import Australian data (coll. with Steve/Gillian)
- EPREL data (compliance and/or public data)
- API data access

- Make analysis and short report on longterm testing, EU endurance
- Make analysis and short report on PstLM and SVM