

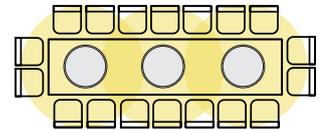
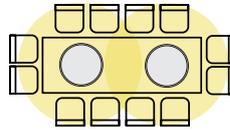
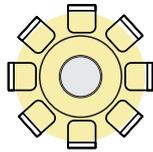
VIDAR TABLE LIGHTING SET FOR ELDERLY CARE

SET SPECIFICATION

PERFORMANCE PARAMETERS

Vidar table lighting set for elderly care is designed to be used in the communal areas of an elderly care facility. It will under representative conditions provide BCL light with a specified BCL impact, measured by lux mEDI or CS. The key design parameter is the BCL impact facing table which will benefit everyone sitting around and facing a table up to the specified size, when the recipe setting is at system max. BCL impact nighttime specifies the circadian impact when the settings to minimize mEDI are used. This is relevant when using the system close to and during night time when minimal circadian impact is desired.

	1x Vidar	2x Vidar	3x Vidar
Table diam / length	1,5m	3,1m	4,8m
Seats	up to 8	up to 12	up to 18
BCL impact facing table	> 700lux mEDI / 0,51 CS	> 800lux mEDI / 0,54 CS	> 850lux mEDI / 0,55 CS
BCL impact night-time	19lux mEDI / 0,046 CS	23lux mEDI / 0,055 CS	25lux mEDI / 0,058 CS



In addition to key design parameter there is significant added value in terms of visual light quality, flicker, energy efficiency and sustainability.

Added value	Elderly care 1x Vidar	Elderly care 2x Vidar	Elderly care 3x Vidar
Work surface illuminance	> 1300lux	> 1600lux	> 1700lux
Floor illuminance	> 550lux	> 800lux	> 1000lux
Efficacy	121lm/W		
mDER	26-95%		
CRI	>90		
Flicker handling	$P_{st}^{LM} \leq 1$, SVM $\leq 0,4$, IEEE 1789 comp.		
Life time	> 100 000h (L70B50), 0,88 (LLMF)		
Energy consumption per 24h	0,52kWh	0,95kWh	1,38kWh

PERFORMANCE CONDITIONS

The BCL impact specification is based on light design modelling using DIALUX and cross correlated with measurements in realizations of spaces according to the conditions. Representative conditions are chosen based on typical space conditions for a conference room for the specified table length. Users are represented by multiple, evenly spaced, 1m² positions, each by average of semicylindrical surfaces facing the table at 1,2m above the floor.

Typical conditions for reflectivity of space surfaces from EN 12464-1:2021, table height and luminaire placement are assumed and the performance will hold true as long as the installation site match these representative conditions. The solution can be used also in spaces that do not match these conditions and the resulting performance parameters will then deviate from what is stated above.

Modelling parameters		Elderly care 1x Vidar	Elderly care 2x Vidar	Elderly care 3x Vidar
Space width	m	8	12	16
Space length	m	16	16	16
Space height	m	2,8	2,8	2,8
Floor reflectivity	arbu	0,3	0,3	0,3
Wall reflectivity	arbu	0,6	0,6	0,6
Ceiling reflectivity	arbu	0,8	0,8	0,8
Table width/diam	m	1,5	0,9	0,9
Table length	m	N/A	3,1	4,8
Table height	m	0,85	0,85	0,85
Table cc distance	m	3	3	3
Table reflectivity	arbu	0,5	0,5	0,5
Table placement		Center of room		
Luminaire height	m	1,75	1,75	1,75
Luminaire placement		Center of table		

Energy consumption is calculated based on utility conditions for the use case in question and for the default light recipe running on the system. Utility conditions follows the standard SS-EN 15193.