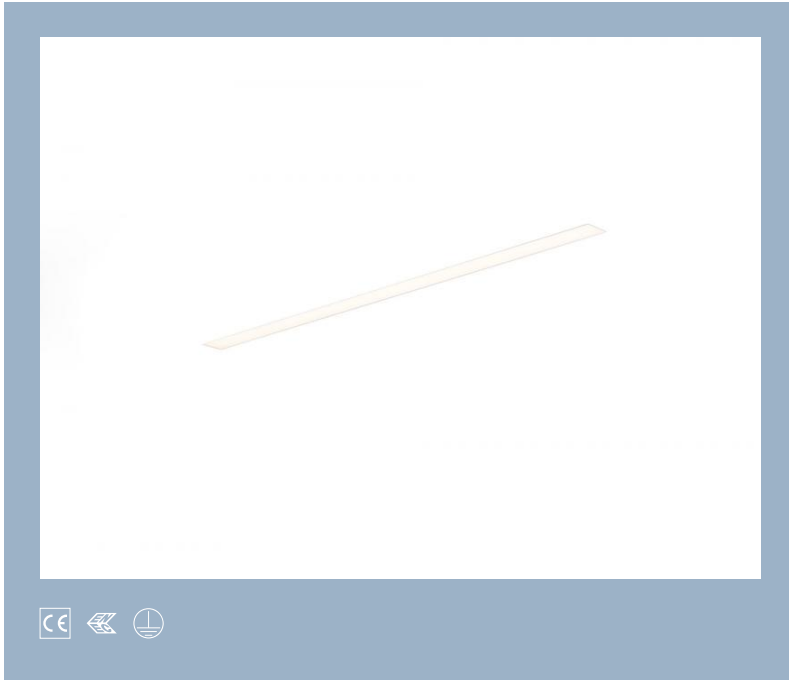


V2M1B1/LEDW18D



module • linear

application : Office, Retail, Horeca, Education, Leisure

light source : LED LP • 3000 K

optics : Diffuser • acrylic (PMMA) HaloOptics® • very wide-angle

UGR classification : <=25

luminous flux: 2200 lm

luminous efficacy : 122 lm/W

LLMF: 97% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

type : in-line mounting: end luminaire

Electrical properties

driver: DALI dimmable

power : 18 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 0 UNLIMITED

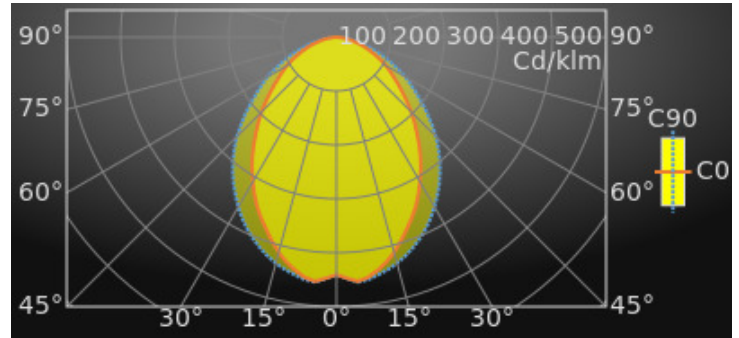
Luminance

luminous flux : 2200 lm

luminous efficacy : 122 lm/W

UGR classification ≤ 25

luminous area : 0.04 m²



Average Luminances (Cd/m²) for 2200lm

Gamma	C0	C30	C45	C60	C90
45°	13865	14670	16233	16797	18434
50°	12501	13424	14947	15574	17066
55°	11403	12291	13717	14423	15712
60°	10614	11020	12437	13094	14684
65°	9534	9979	11563	11730	13186
70°	8572	9027	10422	10323	11705
75°	7405	7724	9134	8943	10272
80°	6578	6229	7866	7146	8663
85°	3193	3852	6205	4467	5618

Classifications

CIE: 550 / 842 / 970 / 1000 / 1000

CIE FLUXCODE : 0.55 / 0.84 / 0.97 / 1.00 / 1.00

BZ: BZ3/1.5/BZ4

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.60

UTE: 1.00 D + 0.00 T

Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	100	2
20	99	4
30	99	6
40	98	8
50	98	10
60	98	12

Intensity for 2200lm

Gamma	C0	C45	C90
0°	969.8	969.8	969.8
5°	1000.5	1004.8	1003.1
10°	966.5	982.3	984.2
15°	909.3	944.7	954.8
20°	835.5	891.4	914.0
25°	764.6	824.1	862.8
30°	681.3	750.7	800.0
35°	597.8	668.1	730.8
40°	510.9	583.2	656.2
45°	431.4	505.1	573.5
50°	353.6	422.7	482.7
55°	287.8	346.2	396.5
60°	233.5	273.6	323.1
65°	177.3	215.0	245.2
70°	129.0	156.8	176.1
75°	84.3	104.0	117.0
80°	50.3	60.1	66.2
85°	12.2	23.8	21.5
90°	1.2	1.2	0.8

UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 2200lm (S = 0.25H)

Ceiling Walls Floor	Room Reflection Factors (%)									
	70	70	50	50	30	70	70	50	50	30
Room Dimensions	Viewed Crosswise					Viewed Endwise				
X = 2H Y = 2H	20.4	22.2	20.8	22.4	22.7	22.0	23.7	22.3	24.0	24.2
Y = 3H	21.5	23.1	21.9	23.4	23.7	23.2	24.8	23.6	25.1	25.4
Y = 4H	22.0	23.4	22.3	23.7	24.0	23.7	25.2	24.0	25.5	25.8
Y = 6H	22.2	23.6	22.6	23.9	24.3	24.0	25.4	24.4	25.7	26.0
Y = 8H	22.3	23.6	22.7	23.9	24.3	24.1	25.4	24.4	25.7	26.1
Y = 12H	22.3	23.6	22.7	23.9	24.2	24.1	25.3	24.5	25.7	26.0
X = 4H Y = 2H	21.1	22.6	21.4	22.9	23.2	22.3	23.8	22.7	24.1	24.4
Y = 3H	22.3	23.6	22.7	24.0	24.3	23.7	25.0	24.1	25.4	25.7
Y = 4H	22.9	24.0	23.3	24.4	24.7	24.3	25.5	24.7	25.8	26.2
Y = 6H	23.3	24.3	23.7	24.6	25.0	24.8	25.8	25.2	26.2	26.6
Y = 8H	23.4	24.3	23.8	24.7	25.1	24.9	25.8	25.3	26.2	26.7
Y = 12H	23.4	24.2	23.8	24.7	25.1	25.0	25.8	25.4	26.2	26.7
X = 8H Y = 4H	23.1	24.1	23.6	24.5	24.9	24.5	25.4	24.9	25.8	26.2
Y = 6H	23.6	24.4	24.1	24.8	25.3	25.0	25.8	25.5	26.2	26.7
Y = 8H	23.8	24.5	24.3	24.9	25.4	25.2	25.9	25.7	26.3	26.8
Y = 12H	23.9	24.5	24.4	24.9	25.5	25.3	25.9	25.8	26.4	26.9
X = 12H Y = 4H	23.1	24.0	23.6	24.4	24.9	24.5	25.3	24.9	25.7	26.2
Y = 6H	23.7	24.4	24.2	24.8	25.3	25.0	25.7	25.5	26.2	26.7
Y = 8H	23.9	24.4	24.4	24.9	25.4	25.2	25.8	25.7	26.3	26.8
UGR Variations with Observer Position for Luminaire Spacings S										
S = 1.0H	+0.2		-0.3		+0.2		-0.2			
S = 1.5H	+0.4		-0.6		+0.3		-0.5			
S = 2.0H	+0.6		-1.1		+0.7		-0.9			



Colour properties

Correlated Colour Temperature : 3000

Ra: 80

Efficiency

Utilisation Factors according to IES (%)

	Room Reflection Factors (%)									
	80	80	80	50	50	50	30	30	30	0
Ceiling	80	80	80	50	50	50	30	30	30	0
Walls	50	30	10	50	30	10	50	30	10	0
Floor	20	20	20	20	20	20	20	20	20	0
RCR = 1	105	102	100	98	96	94	94	93	91	86
2	92	87	83	86	83	80	83	80	78	73
3	81	75	70	77	72	68	74	70	67	63
4	73	66	60	69	63	59	67	62	58	55
5	66	58	53	62	56	51	60	55	51	48
6	60	52	46	57	50	46	55	49	45	42
7	54	47	41	52	45	41	51	45	40	38
8	50	42	37	48	41	37	47	41	36	34
9	46	39	33	44	38	33	43	37	33	31
10	43	35	31	41	35	30	40	34	30	28

Utilisation Factors according to LiTG (%)

	Room Reflection Factors (%)									
	80	80	80	50	50	50	50	50	30	0
Ceiling	80	80	80	50	50	50	50	50	30	0
Walls	50	30	50	30	50	30	50	30	30	0
Floor	30	30	10	10	30	30	10	10	10	0
k = 0.60	52	44	50	42	50	43	48	42	41	35
0.80	63	54	59	52	60	53	57	51	51	44
1.00	72	63	67	60	68	61	64	58	58	51
1.25	82	73	75	68	77	70	72	67	66	60
1.50	88	80	80	74	82	76	77	72	71	65
2.00	96	89	86	81	89	84	83	79	78	72
2.50	103	96	91	86	95	90	88	84	83	78
3.00	107	101	94	90	99	95	91	88	87	82
4.00	112	107	97	94	103	99	94	91	90	85
5.00	116	111	99	97	106	102	96	94	92	88