

U3112/LEDN330DE



luminária de encastrar • quadrada

aplicação : Espaços de trabalho, Salas de aulas

base: aço lacada

fonte de luz : LED • 4000 K

óptica : Shielded lens • polycarbonate (PC) with aluminium thin film • extensiva média

classificação UGR : <=19

fluxo luminoso: 3100 lm

fluxo luminoso específico : 141 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

Product information

Medidas

dimensões : 596 mm x 596 mm x 58 mm

medida encastrável : 596 mm x 596 mm x 70 mm

módulo do tecto : M600

cor: RAL9003 - branco (texturado)

tipo : luminária individual

IP: IP20

Equipamento eléctrico

driver: DALI driver controlado por sensor integrado

potência : 22 W

tensão : 220-240V

frequência : 50-60Hz AC

segurança fotobiológica : EN 62471: RISK GROUP 1 UNLIMITED

Luminance

fluxo luminoso : 3100 lm

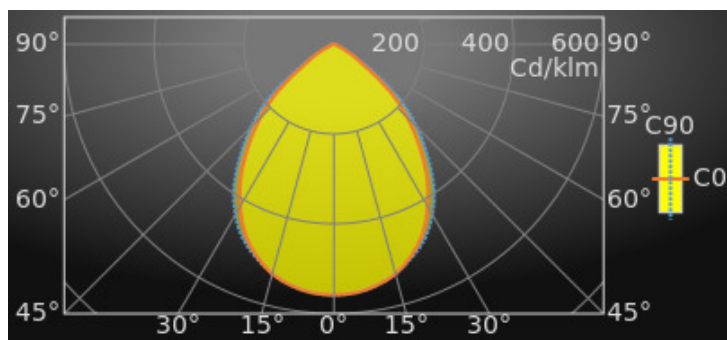
fluxo luminoso específico : 141 lm/W

classificação UGR =: <=19

área luminosa : 0.09 m²

Average Luminances (Cd/m²) for 3100lm

Gamma	C0	C30	C45	C60	C90
45°	11418	13013	13719	13259	12825
50°	8809	10983	11833	11462	10447
55°	4973	7904	9806	9263	6454
60°	3105	4839	6778	5129	3073
65°	945	1913	3062	2435	2122
70°	546	694	1018	1511	1380
75°	396	454	558	862	1135
80°	109	231	323	467	904
85°	1	0	16	92	640



Classificações

CIE: 681 / 963 / 997 / 1000 / 1000

CIE FLUXCODE : 0.68 / 0.96 / 1.00 / 1.00 / 1.00

BZ: BZ2

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.70

UTE: 1.00 C + 0.00 T

Lifetime Data (Tq=25.0°C)

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

Intensidades luminosas em cd

Intensity for 3100lm

Gamma	C0	C45	C90
0°	1731.6	1731.6	1731.6
5°	1722.5	1718.0	1716.6
10°	1691.6	1689.7	1690.0
15°	1641.6	1639.0	1636.6
20°	1557.0	1566.6	1567.9
25°	1447.5	1476.5	1483.2
30°	1293.2	1349.9	1358.9
35°	1119.0	1210.0	1202.0
40°	919.8	1036.0	1001.9
45°	719.4	864.4	808.0
50°	504.5	677.7	598.3
55°	254.1	501.1	329.9
60°	138.3	301.9	136.9
65°	35.6	115.3	79.9
70°	16.6	31.0	42.0
75°	9.1	12.9	26.2
80°	1.7	5.0	14.0
85°	0.0	0.1	5.0
90°	0.0	0.0	0.0

classificação UGR =

Corrected Glare Ratings for a Total Lamp Flux of 3100lm (S = 0.25H)

	Room Reflection Factors (%)										
Ceiling	70	70	50	50	30	70	70	50	50	30	
Walls	50	30	50	30	30	50	30	50	30	30	
Floor	20	20	20	20	20	20	20	20	20	20	
Room Dimensions	Viewed Crosswise					Viewed Endwise					
X = 2H Y = 2H	18.4	20.0	18.7	20.2	20.5	18.8	20.4	19.1	20.7	21.0	
Y = 3H	18.2	19.7	18.6	19.9	20.2	18.8	20.2	19.1	20.5	20.8	
Y = 4H	18.1	19.5	18.5	19.8	20.1	18.7	20.1	19.1	20.4	20.7	
Y = 6H	18.1	19.3	18.4	19.6	19.9	18.7	19.9	19.0	20.2	20.5	
Y = 8H	18.0	19.2	18.4	19.5	19.9	18.6	19.8	19.0	20.1	20.5	
Y = 12H	18.0	19.1	18.4	19.5	19.8	18.6	19.7	19.0	20.1	20.4	
X = 4H Y = 2H	18.5	19.9	18.9	20.2	20.5	18.9	20.3	19.3	20.6	20.9	
Y = 3H	18.4	19.5	18.8	19.9	20.2	18.9	20.0	19.3	20.4	20.7	
Y = 4H	18.3	19.3	18.7	19.7	20.1	18.9	19.9	19.3	20.2	20.6	
Y = 6H	18.3	19.1	18.7	19.5	19.9	18.8	19.7	19.3	20.1	20.5	
Y = 8H	18.2	19.0	18.7	19.4	19.9	18.8	19.6	19.3	20.0	20.4	
Y = 12H	18.2	18.9	18.7	19.4	19.8	18.8	19.5	19.2	19.9	20.4	
X = 8H Y = 4H	18.3	19.1	18.7	19.5	19.9	18.8	19.6	19.2	20.0	20.4	
Y = 6H	18.2	18.9	18.7	19.3	19.8	18.8	19.4	19.2	19.9	20.3	
Y = 8H	18.2	18.7	18.6	19.2	19.7	18.7	19.3	19.2	19.8	20.3	
Y = 12H	18.1	18.6	18.6	19.1	19.6	18.7	19.2	19.2	19.7	20.2	
X = 12H Y = 4H	18.2	18.9	18.7	19.4	19.8	18.8	19.5	19.2	19.9	20.3	
Y = 6H	18.2	18.7	18.6	19.2	19.7	18.7	19.3	19.2	19.8	20.2	
Y = 8H	18.1	18.6	18.6	19.1	19.6	18.7	19.2	19.2	19.7	20.2	
	UGR Variations with Observer Position for Luminaire Spacings S										
S = 1.0H	+1.0				-2.3		+0.7			-1.4	
S = 1.5H	+2.2				-7.4		+2.1			-6.4	
S = 2.0H	+3.6				-14.2		+3.3			-8.1	

Colour properties

Correlated Colour Temperature : 4000

Ra: CRI (Ra) 80

Eficiência

Utilisation Factors according to IES (%)										
	Room Reflection Factors (%)									
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	108	106	104	102	100	99	98	97	96	90
2	97	93	90	92	89	87	89	86	84	80
3	88	83	79	83	79	76	81	77	75	71
4	80	74	69	76	71	67	74	70	66	63
5	72	66	61	69	64	60	67	63	59	56
6	66	59	54	64	58	54	62	57	53	50
7	61	54	49	59	53	48	57	52	48	46
8	56	49	44	54	48	44	53	47	43	41
9	52	45	40	50	44	40	49	44	40	38
10	48	41	37	47	41	37	46	40	36	35

Utilisation Factors according to LiTG (%)										
	Room Reflection Factors (%)									
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	59	51	56	50	57	50	55	49	49	43
0.80	71	63	67	60	68	61	65	60	59	54
1.00	80	72	74	68	76	69	72	67	66	61
1.25	90	82	82	77	85	79	80	76	75	70
1.50	95	88	87	82	90	84	84	80	79	75
2.00	103	96	92	88	96	91	89	86	85	80
2.50	108	102	96	92	100	96	93	90	89	85
3.00	112	108	98	96	104	101	96	94	92	88
4.00	116	112	100	98	107	104	97	96	94	90
5.00	119	115	102	100	109	106	99	98	96	93

Esboço

