

US01K1/LEDN30D

recessed luminaire • square

application : Office, Healthcare, Education, Horeca, Retail, Leisure

housing: lacquered sheet steel with closed lamp shielding

light source : LED LP • 4000 K

optics : Softlight • wide-angle

UGR classification : <=19

luminous flux: 3000 lm

luminous efficacy : 120 lm/W

LLMF: 97% @ 50khrs (Tq=25°C)



Mechanical properties

dimensions : 595 mm x 595 mm x 120 mm

cut-out size : 580 mm x 580 mm

ceiling modulation : M600

colour: RAL9210-white

type : individual luminaire

IP: IP20

Luminance

luminous flux : 3000 lm

luminous efficacy : 120 lm/W

luminance @ 65° : 3000 cd/m²

UGR classification: <=19

luminous area : 0.33 m²

Electrical properties

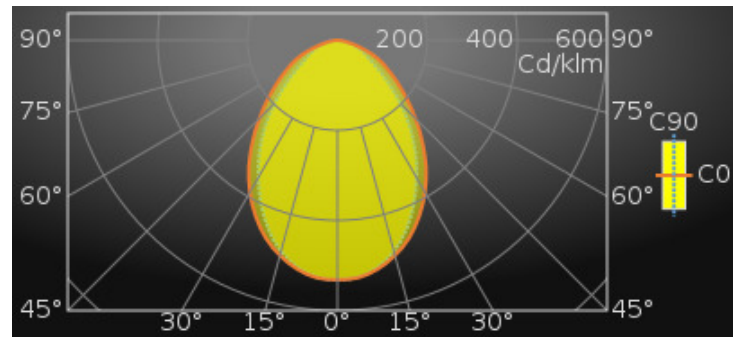
driver: DALI dimmable

power : 25 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 0 UNLIMITED



Average Luminances (Cd/m²) for 3000lm

Gamma	C0	C30	C45	C60	C90
45°	3146	3001	2759	2568	2533
50°	2831	2595	2299	2119	2105
55°	2563	2227	1960	1818	1732
60°	2347	1965	1767	1666	1462
65°	2177	1799	1670	1528	1397
70°	1826	1634	1613	1419	1315
75°	1441	1335	1413	1366	1230
80°	990	1071	1112	1170	1096
85°	448	517	565	731	699

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Classifications

CIE: 607 / 870 / 976 / 1000 / 1000

CIE FLUXCODE : 0.61 / 0.87 / 0.98 / 1.00 / 1.00

BZ: BZ3/1.25/BZ2/1.5/BZ3

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.64

UTE: 1.00 D + 0.00 T

Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	99	2
20	99	4
30	98	6
40	98	8
50	97	10
60	96	12

Intensity for 3000lm

Gamma	C0	C45	C90
0°	1594.9	1594.9	1594.9
5°	1587.2	1586.1	1583.3
10°	1547.8	1545.6	1537.1
15°	1483.8	1475.1	1456.3
20°	1401.1	1375.7	1342.4
25°	1292.7	1254.8	1206.3
30°	1168.7	1117.4	1055.0
35°	1031.1	969.4	907.8
40°	881.3	813.4	751.5
45°	735.5	645.0	592.2
50°	601.6	488.6	447.4
55°	486.0	371.7	328.5
60°	387.9	292.0	241.6
65°	304.2	233.3	195.2
70°	206.5	182.4	148.7
75°	123.3	120.9	105.3
80°	56.9	63.9	62.9
85°	12.9	16.3	20.1
90°	0.2	0.2	0.2

UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 3000lm (S = 0.25H)

Ceiling Walls Floor	Room Reflection Factors (%)									
	70	70	50	50	30	70	70	50	50	30
	50	30	50	30	30	50	30	50	30	30
	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise				
X = 2H Y = 2H	15.3	17.0	15.6	17.3	17.5	13.5	15.1	13.8	15.4	15.6
Y = 3H	16.5	18.0	16.9	18.3	18.6	14.4	15.9	14.7	16.1	16.4
Y = 4H	16.9	18.3	17.2	18.6	18.9	14.8	16.2	15.1	16.5	16.8
Y = 6H	17.0	18.3	17.4	18.7	19.0	15.1	16.4	15.5	16.7	17.1
Y = 8H	17.0	18.3	17.4	18.6	19.0	15.2	16.5	15.6	16.8	17.1
Y = 12H	17.0	18.2	17.4	18.6	18.9	15.2	16.4	15.6	16.8	17.1
X = 4H Y = 2H	15.6	17.0	15.9	17.3	17.6	14.0	15.5	14.4	15.8	16.1
Y = 3H	17.0	18.2	17.3	18.5	18.9	15.2	16.4	15.6	16.7	17.1
Y = 4H	17.4	18.5	17.8	18.9	19.2	15.7	16.8	16.1	17.2	17.5
Y = 6H	17.7	18.7	18.1	19.0	19.4	16.2	17.1	16.6	17.5	17.9
Y = 8H	17.7	18.6	18.2	19.0	19.5	16.3	17.2	16.7	17.6	18.0
Y = 12H	17.7	18.5	18.2	19.0	19.4	16.4	17.2	16.8	17.6	18.0
X = 8H Y = 4H	17.6	18.5	18.0	18.9	19.3	16.0	16.9	16.5	17.3	17.7
Y = 6H	17.9	18.7	18.4	19.1	19.6	16.6	17.3	17.1	17.8	18.2
Y = 8H	18.0	18.6	18.5	19.1	19.6	16.8	17.4	17.3	17.9	18.4
Y = 12H	18.0	18.6	18.5	19.0	19.6	16.9	17.4	17.4	17.9	18.4
X = 12H Y = 4H	17.6	18.4	18.0	18.8	19.2	16.0	16.8	16.5	17.3	17.7
Y = 6H	17.9	18.6	18.4	19.0	19.5	16.6	17.3	17.1	17.7	18.2
Y = 8H	18.0	18.6	18.5	19.1	19.6	16.8	17.4	17.3	17.9	18.4
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+0.3		-0.3		+0.3		-0.3			
S = 1.5H	+0.4		-0.7		+0.5		-0.7			
S = 2.0H	+0.8		-1.0		+1.0		-1.0			

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Colour properties

Correlated Colour Temperature : 4000

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	106	103	101	99	97	96	95	94	92	87
2	94	89	86	88	85	82	85	82	80	75
3	84	78	73	79	74	71	76	72	69	66
4	75	68	64	71	66	62	69	65	61	58
5	68	61	56	65	59	55	63	58	54	51
6	62	55	50	60	53	49	58	52	48	46
7	57	50	44	55	48	44	53	48	44	41
8	53	45	40	51	44	40	49	44	39	37
9	49	41	37	47	41	36	46	40	36	34
10	45	38	34	44	38	33	43	37	33	31

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	55	47	53	46	53	46	51	45	45	39
0.80	67	58	63	56	64	56	61	55	54	48
1.00	75	66	70	63	71	64	67	62	61	55
1.25	85	76	77	71	80	73	75	70	69	64
1.50	91	83	82	77	85	79	80	75	74	69
2.00	99	91	88	83	92	86	85	81	80	75
2.50	104	98	92	88	97	92	89	86	85	80
3.00	109	103	96	92	101	96	93	90	88	84
4.00	113	108	98	95	104	100	95	93	91	87
5.00	117	113	100	98	107	104	97	95	94	90

Available accessories

US01H010/600 Mounting frame for plaster-board, wooden, ... ceiling

Dimensional drawing

