

US01I1/LEDN30S

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: 3050 lm

luminous efficacy : 139 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 : 3050 lm

luminous efficacy : 139 lm/W

luminance @ 65° : 3000 cd/m²

UGR classification: <=19

luminous area : 0.33 m²

Electrical properties

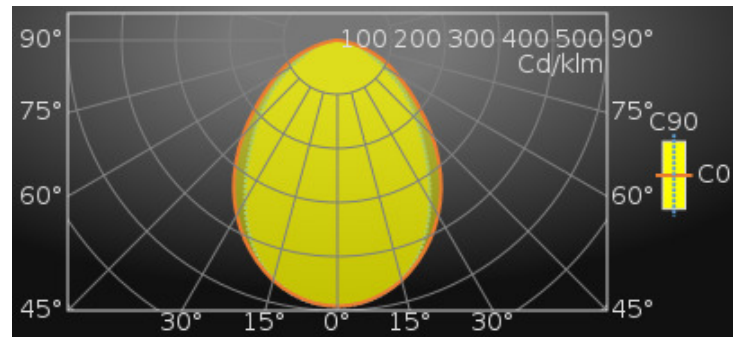
driver: not dimmable

power : 22 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 0 UNLIMITED



Average Luminances (Cd/m²) for 3050lm

Gamma	C0	C30	C45	C60	C90
45°	3224	3119	2948	2812	2710
50°	2893	2760	2539	2419	2443
55°	2608	2407	2129	2081	2167
60°	2377	2103	1872	1902	1824
65°	2204	1905	1784	1742	1545
70°	1903	1747	1732	1550	1421
75°	1524	1485	1561	1461	1380
80°	978	1202	1258	1317	1212
85°	464	530	590	811	755

US01I1/LEDN30S

Classifications

CIE: 583 / 860 / 975 / 1000 / 1000

CIE FLUXCODE : 0.58 / 0.86 / 0.97 / 1.00 / 1.00

BZ: BZ3

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.62

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	97	12

Intensity for 3050lm

Gamma	C0	C45	C90
0°	1500.1	1500.1	1500.1
5°	1488.7	1489.1	1489.8
10°	1454.7	1459.5	1456.0
15°	1402.5	1402.1	1395.9
20°	1328.2	1320.1	1310.0
25°	1240.3	1220.2	1189.9
30°	1138.7	1101.2	1045.5
35°	1023.2	969.2	894.7
40°	890.4	834.4	754.7
45°	753.8	689.3	633.5
50°	614.8	539.6	519.2
55°	494.5	403.8	410.9
60°	392.9	309.5	301.6
65°	308.0	249.2	215.9
70°	215.2	195.9	160.7
75°	130.4	133.6	118.1
80°	56.1	72.2	69.6
85°	13.4	17.0	21.7
90°	0.2	0.2	0.2

UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 3050lm (S = 0.25H)

Room Dimensions	Room Reflection Factors (%)												
	Ceiling	Walls	Floor	70	50	30	70	50	30	70	50	30	
	70	70	50	50	30	70	70	50	50	30	70	50	30
	50	30	50	30	30	50	30	50	30	30	50	30	30
	20	20	20	20	20	20	20	20	20	20	20	20	20
	Viewed Crosswise					Viewed Endwise							
X = 2H Y = 2H	15.5	17.2	15.8	17.5	17.7	14.2	15.9	14.6	16.2	16.5			
Y = 3H	16.7	18.3	17.1	18.5	18.8	15.2	16.7	15.5	17.0	17.3			
Y = 4H	17.1	18.5	17.5	18.8	19.2	15.6	17.0	15.9	17.3	17.6			
Y = 6H	17.2	18.6	17.6	18.9	19.2	15.9	17.2	16.2	17.5	17.9			
Y = 8H	17.3	18.5	17.6	18.9	19.2	16.0	17.3	16.3	17.6	17.9			
Y = 12H	17.2	18.5	17.6	18.8	19.2	16.0	17.2	16.4	17.6	17.9			
X = 4H Y = 2H	15.8	17.2	16.2	17.5	17.9	14.8	16.2	15.1	16.5	16.8			
Y = 3H	17.2	18.4	17.6	18.8	19.1	15.9	17.1	16.3	17.5	17.8			
Y = 4H	17.7	18.8	18.1	19.2	19.5	16.4	17.5	16.9	17.9	18.3			
Y = 6H	18.0	18.9	18.4	19.3	19.7	16.9	17.9	17.3	18.3	18.7			
Y = 8H	18.0	18.9	18.4	19.3	19.7	17.0	17.9	17.5	18.3	18.7			
Y = 12H	18.0	18.8	18.5	19.2	19.7	17.1	17.9	17.5	18.3	18.8			
X = 8H Y = 4H	17.9	18.8	18.3	19.2	19.6	16.7	17.6	17.2	18.0	18.5			
Y = 6H	18.2	19.0	18.7	19.4	19.9	17.3	18.1	17.8	18.5	19.0			
Y = 8H	18.3	19.0	18.8	19.4	19.9	17.5	18.2	18.0	18.6	19.1			
Y = 12H	18.3	18.9	18.8	19.4	19.9	17.6	18.2	18.1	18.6	19.2			
X = 12H Y = 4H	17.9	18.7	18.3	19.1	19.6	16.7	17.6	17.2	18.0	18.4			
Y = 6H	18.3	18.9	18.7	19.4	19.9	17.3	18.0	17.8	18.5	18.9			
Y = 8H	18.3	18.9	18.8	19.4	19.9	17.6	18.1	18.1	18.6	19.1			
	UGR Variations with Observer Position for Luminaire Spacings S												
S = 1.0H	+0.3		-0.3		+0.2		-0.3						
S = 1.5H	+0.3		-0.7		+0.3		-0.6						
S = 2.0H	+0.8		-1.0		+0.8		-1.1						

US01I1/LEDN30S

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	105	103	101	99	97	95	95	93	92	87
2	93	88	85	88	84	81	84	81	79	74
3	83	77	72	78	73	70	76	71	68	64
4	74	67	62	70	65	61	68	63	60	56
5	67	60	54	64	58	53	62	57	53	50
6	61	54	48	58	52	47	57	51	47	44
7	56	48	43	54	47	42	52	46	42	40
8	52	44	39	49	43	38	48	42	38	36
9	48	40	35	46	39	35	45	39	35	33
10	44	37	32	43	36	32	42	36	32	30

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	54	46	51	44	52	45	50	44	43	37
0.80	65	56	61	54	62	55	59	53	53	46
1.00	74	65	68	62	70	63	66	60	60	54
1.25	83	75	76	70	78	72	74	69	68	62
1.50	90	81	81	76	84	78	79	74	73	67
2.00	98	90	87	82	91	85	84	80	79	74
2.50	104	97	92	87	96	91	89	85	84	79
3.00	108	103	95	91	100	96	92	89	88	83
4.00	113	108	98	95	103	100	95	92	91	86
5.00	117	112	100	98	106	103	97	95	93	89

Available accessories

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

Dimensional drawing

