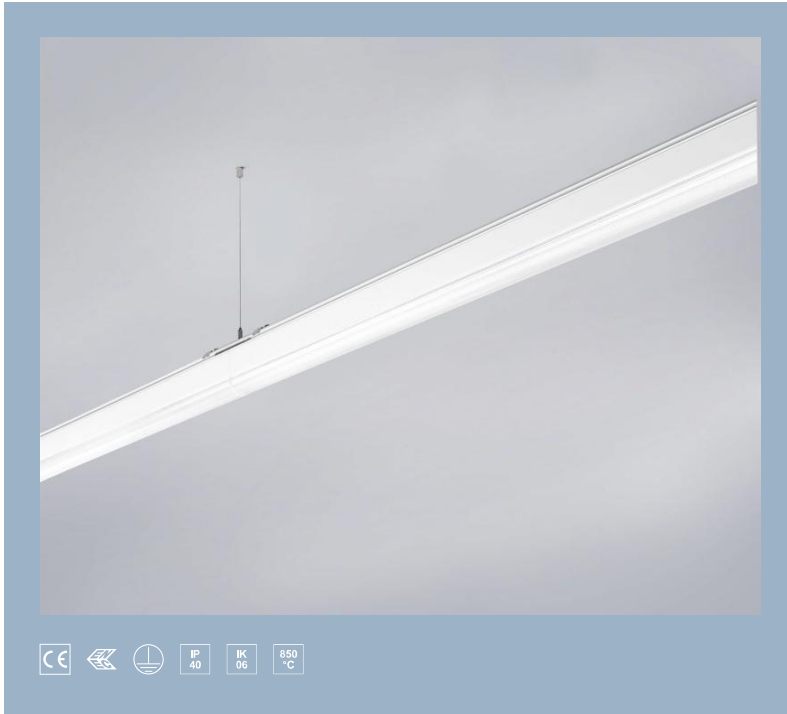


# E4001/LED2N060S



**industrial luminaire • linear**

application : Industry, Logistics

housing: lacquered aluminium

light source : LED LP • 4000 K

optics : DUAL?LENS • polycarbonate (PC) • narrow-angle

UGR classification : <=22

luminous flux: 6200 lm

luminous efficacy : 127 lm/W

LLMF: 96% @ 50khrs (Tq=25°C)

## Product information

### Mechanical properties

colour: RAL9016 - traffic white (textured)

type : in-line mounting: intermediate luminaire

IP: IP40

### Electrical properties

driver: not dimmable

power : 49 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1  
UNLIMITED



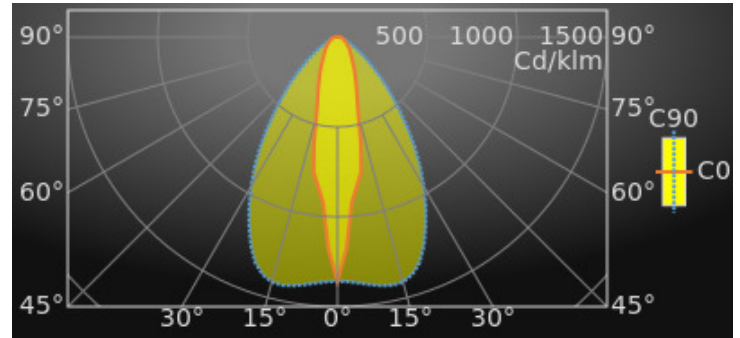
## Luminance

luminous flux : 6200 lm

luminous efficacy : 127 lm/W

UGR classification  $\leq 22$

luminous area : 0.12 m<sup>2</sup>



Average Luminances (Cd/m<sup>2</sup>) for 6200lm

Gamma	C0	C30	C45	C60	C90
45°	4537	5191	6509	9721	27971
50°	3896	4357	5278	7513	20286
55°	3380	3710	4278	5753	14840
60°	2969	3231	3451	4464	10853
65°	2616	2838	2832	3607	8329
70°	2354	2490	2382	3024	6910
75°	2155	2189	2056	2535	6674
80°	2012	1931	1751	2047	6321
85°	1902	1687	1433	1619	5444

## Classifications

CIE: 710 / 894 / 961 / 989 / 1000

CIE FLUXCODE : 0.72 / 0.90 / 0.97 / 0.99 / 1.00

BZ: BZ1/0.8/BZ2

CAE: CAE 1/15°/CAE 2/25°/CAE 4/75°/CAE 3

DIN: A60 (Nach Arbeitsblatt 7 und 8)

DIN\_U: Phi u = 0.99

DIN\_SU: Phi su = 0.72

UTE: 0.99 B + 0.01 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	97	8
50	97	10
60	96	12

Intensity for 6200lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	8421.0	8421.0	8421.0	90°	109.9	50.9	2.4
5°	5724.4	6751.4	8512.6	95°	89.7	31.4	0.0
10°	4706.7	5043.1	8704.4	100°	69.5	15.7	0.0
15°	2768.3	4198.2	8749.8	105°	49.9	5.5	0.0
20°	1938.1	2847.6	8280.4	110°	31.5	1.3	0.0
25°	1455.6	2096.3	7207.8	115°	16.3	0.3	0.0
30°	1086.7	1612.0	5954.5	120°	5.3	0.0	0.0
35°	852.4	1251.5	4649.5	125°	1.1	0.0	0.0
40°	697.4	967.0	3379.1	130°	0.3	0.0	0.0
45°	577.5	747.6	2373.4	135°	0.0	0.0	0.0
50°	479.6	578.7	1564.8	140°	0.0	0.0	0.0
55°	398.8	443.1	1021.4	145°	0.0	0.0	0.0
60°	332.4	333.9	651.2	150°	0.0	0.0	0.0
65°	275.0	252.5	422.4	155°	0.0	0.0	0.0
70°	229.3	192.7	283.6	160°	0.0	0.0	0.0
75°	191.8	148.1	207.3	165°	0.0	0.0	0.0
80°	160.8	109.7	131.7	170°	0.0	0.0	0.0
85°	133.5	75.6	56.9	175°	0.0	0.0	0.0
90°	109.9	50.9	2.4	180°	0.0	0.0	0.0

## UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 6200lm (S = 0.25H)

Ceiling	Room Reflection Factors (%)									
	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	14.0	15.5	14.3	15.7	16.0	19.9	21.3	20.2	21.6	21.8
Y = 3H	15.1	16.4	15.5	16.7	17.0	20.4	21.7	20.7	22.0	22.3
Y = 4H	15.7	16.9	16.0	17.2	17.5	20.7	21.9	21.0	22.2	22.5
Y = 6H	16.2	17.4	16.6	17.7	18.0	20.9	22.1	21.3	22.4	22.7
Y = 8H	16.5	17.6	16.9	17.9	18.3	21.0	22.1	21.4	22.4	22.8
Y = 12H	16.7	17.8	17.1	18.1	18.5	21.1	22.1	21.4	22.4	22.8
X = 4H Y = 2H	14.5	15.8	14.9	16.1	16.4	19.7	21.0	20.1	21.3	21.6
Y = 3H	15.9	16.9	16.3	17.3	17.6	20.4	21.4	20.8	21.8	22.1
Y = 4H	16.6	17.5	17.0	17.9	18.3	20.8	21.7	21.2	22.1	22.4
Y = 6H	17.3	18.1	17.7	18.5	18.9	21.1	21.9	21.6	22.3	22.8
Y = 8H	17.6	18.4	18.1	18.8	19.2	21.3	22.0	21.7	22.4	22.9
Y = 12H	18.0	18.7	18.4	19.1	19.6	21.3	22.0	21.8	22.5	22.9
X = 8H Y = 4H	16.8	17.6	17.2	18.0	18.4	20.7	21.5	21.2	21.9	22.4
Y = 6H	17.7	18.3	18.1	18.8	19.2	21.2	21.8	21.6	22.3	22.7
Y = 8H	18.1	18.7	18.6	19.2	19.7	21.3	21.9	21.8	22.4	22.9
Y = 12H	18.6	19.1	19.1	19.6	20.1	21.5	22.0	22.0	22.5	23.0
X = 12H Y = 4H	16.8	17.5	17.3	17.9	18.4	20.7	21.4	21.2	21.9	22.3
Y = 6H	17.7	18.3	18.2	18.7	19.2	21.2	21.7	21.6	22.2	22.7
Y = 8H	18.2	18.7	18.7	19.2	19.7	21.4	21.9	21.9	22.3	22.9
<b>UGR Variations with Observer Position for Luminaire Spacings S</b>										
S = 1.0H	+0.3		-0.3		+1.0		-0.9			
S = 1.5H	+0.4		-0.6		+2.6		-1.7			
S = 2.0H	+0.4		-0.9		+4.0		-2.4			



## 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	107	105	103	100	98	97	96	95	94	88
2	97	93	90	91	88	86	88	85	83	78
3	88	83	79	83	79	76	81	77	75	71
4	81	75	71	77	72	69	75	70	67	64
5	75	68	64	71	66	62	69	65	61	58
6	69	63	58	66	61	57	65	60	56	54
7	64	58	53	62	56	52	61	56	52	50
8	60	54	49	58	52	49	57	52	48	46
9	57	50	46	55	49	45	54	49	45	43
10	53	47	43	52	46	42	51	46	42	40

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	65	58	62	56	63	57	61	56	55	50
0.80	75	67	70	64	72	65	68	63	63	58
1.00	82	75	76	71	78	72	74	70	69	64
1.25	91	83	83	78	86	80	81	77	76	71
1.50	96	89	87	82	90	85	84	81	79	75
2.00	103	96	92	88	95	91	89	86	84	80
2.50	107	102	95	91	99	95	92	89	88	83
3.00	111	106	97	95	103	99	94	92	91	86
4.00	115	110	99	97	105	102	96	94	93	88
5.00	118	114	101	99	107	105	98	96	94	90

## Available accessories

E7H301 Connector (1 per line), 5 or 7 pole, per piece

E4H1000 Line end piece, per piece

E4H111 Single mounting bracket for ceiling mounting

E4H112 Double mounting bracket for ceiling mounting

E4H121 Single mounting bracket for threaded rod

E4H122 Double mounting bracket for threaded rod

E4H131 Single mounting bracket for chain

E4H141 Single mounting bracket for steel wire

E4H142 Double mounting bracket for steel wire

E4H132 Double mounting bracket for chain





This document has been compiled by ETAP with the greatest possible care. However, the information contained in this publication is not binding and may change due to technical development. ETAP is not liable for any damage whatsoever resulting from the use of this document.  
[www.etaplighting.com](http://www.etaplighting.com) // Made in Belgium