E4001/LED2N060D



industrial luminaire • linear

Application : Production sites

housing: lacquered aluminium

light source : LED • 4000 K

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

UGR classification : <=22

luminous flux: 6200 lm

luminous efficacy : 122 lm/W

LLMF: 96% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 2000 mm x 60 mm x 135 mm

colour: RAL9016 - traffic white (textured)

type : in-line mounting: intermediate luminaire

IP: IP40

IK: IK06

Electrical properties

driver: DALI dimmable

power : 51 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

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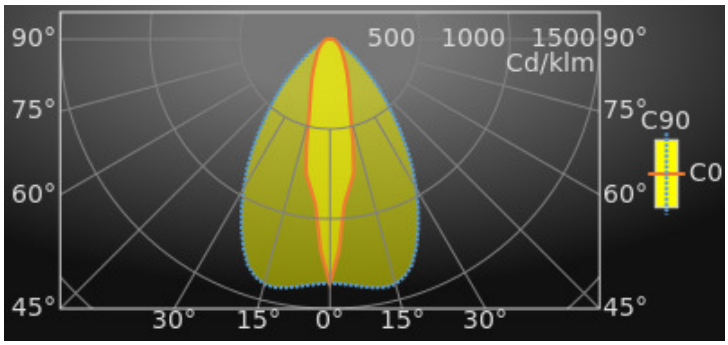
Luminance

luminous flux : 6200 lm

luminous efficacy : 122 lm/W

UGR classification =: <=22

luminous area : 0.12 m²



Average Luminances (Cd/m²) 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

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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

Luminous intensities in cd

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)

	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	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

	UGR Variations with Observer Position for Luminaire Spacings S			
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: CRI (Ra) 80

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Efficiency

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	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 (%)									
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*

E4H103 *Alignment bracket*

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