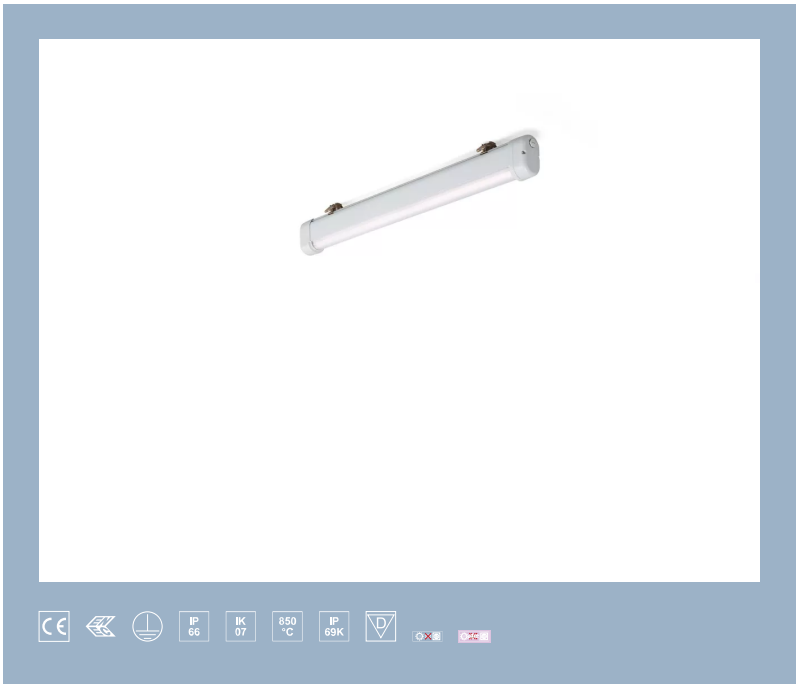
E21/LED4N060D



surface-mounted luminaire • linear

Application : Harsh environments

housing: lacquered aluminium

light source : LED • 4000 K

optics : linear lens • polycarbonate (PC) • medium wide-angle

UGR classification : <=25

luminous flux: 6050 lm

luminous efficacy : 129 lm/W

LLMF: 96% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 1120 mm x 80 mm x 135 mm

colour: RAL7035 - light grey

type : individual luminaire

IP: IP66, IP69K

IK: IK07

ambient temperature: -25°C - 35°C (Optional: -35°C - 60°C) •

Electrical properties

driver: DALI dimmable

power : 47 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

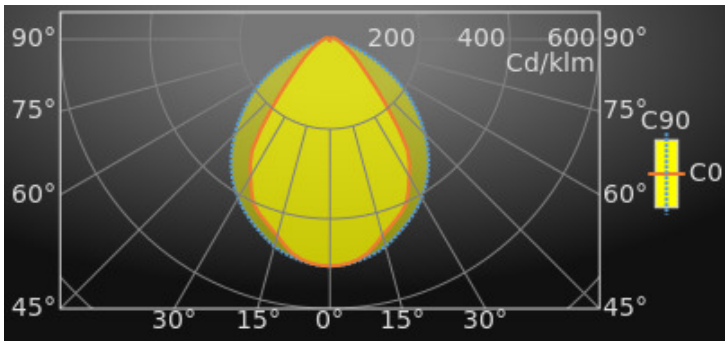
Luminance

luminous flux : 6050 lm

luminous efficacy : 129 lm/W

UGR classification =: <=25

luminous area : 0.07 m²



Average Luminances (Cd/m²) for 6050lm

Gamma	C0	C30	C45	C60	C90
45°	11697	15986	22912	29063	38863
50°	8432	11024	16442	25157	36265
55°	6489	8119	11645	19956	33355
60°	5098	6373	8601	15044	29349
65°	4280	5102	6698	11053	24241
70°	3534	4378	5530	8243	18895
75°	3096	3818	4645	6302	14121
80°	2898	3347	4092	5005	9888
85°	2774	3093	3655	4086	4798

Classifications

CIE: 607 / 867 / 954 / 983 / 1002

CIE FLUXCODE : 0.62 / 0.88 / 0.97 / 0.98 / 1.00

BZ: BZ2/1/BZ3/1.25/BZ2/1.5/BZ3

CAE: CAE 3/5°/CAE 2/55°/CAE 3

DIN: A50 (Nach Arbeitsblatt 7 und 8)

DIN_U: Phi u = 0.98

DIN_SU: Phi su = 0.64

UTE: 0.98 C + 0.02 T

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

Luminous intensities in cd

Intensity for 6050lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	3054.9	3054.9	3054.9	90°	85.3	75.1	1.3
5°	3025.8	3017.8	3031.3	95°	72.0	55.1	0.1
10°	2927.1	2975.3	2977.0	100°	66.6	42.7	0.0
15°	2736.3	2834.9	2887.6	105°	58.2	32.2	0.1
20°	2591.5	2647.0	2758.0	110°	46.2	24.3	0.0
25°	2433.0	2509.2	2624.1	115°	35.9	18.3	0.0
30°	2132.1	2368.8	2469.8	120°	27.3	13.1	0.0
35°	1821.8	2061.4	2285.3	125°	19.5	8.6	0.0
40°	1219.7	1803.7	2062.7	130°	13.5	4.7	0.0
45°	788.6	1404.9	1809.9	135°	8.8	0.3	0.0
50°	547.5	958.7	1535.3	140°	4.5	0.0	0.0
55°	401.9	638.8	1260.0	145°	0.1	0.0	0.1
60°	298.1	438.6	966.5	150°	0.0	0.0	0.1
65°	233.5	313.0	674.7	155°	0.0	0.0	0.1
70°	177.5	232.9	425.6	160°	0.0	0.0	0.2
75°	141.0	172.7	240.7	165°	0.1	0.0	0.1
80°	117.3	130.8	113.1	170°	0.6	0.5	0.3
85°	97.4	96.9	27.5	175°	1.6	1.4	1.2
90°	85.3	75.1	1.3	180°	1.5	1.5	1.5

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 6050lm (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	18.3	19.9	18.6	20.2	20.5	23.9	25.5	24.2	25.8	26.1
Y = 3H	18.6	20.1	19.0	20.4	20.7	24.8	26.2	25.1	26.6	26.9
Y = 4H	18.8	20.2	19.2	20.5	20.9	25.0	26.4	25.4	26.7	27.1
Y = 6H	19.0	20.3	19.4	20.6	21.0	25.1	26.4	25.5	26.8	27.1
Y = 8H	19.1	20.3	19.5	20.7	21.1	25.1	26.4	25.5	26.7	27.1
Y = 12H	19.2	20.4	19.6	20.8	21.1	25.1	26.3	25.5	26.7	27.0
X = 4H Y = 2H	18.9	20.3	19.3	20.6	20.9	23.8	25.1	24.1	25.5	25.8
Y = 3H	19.4	20.5	19.8	20.9	21.3	24.8	26.0	25.2	26.3	26.7
Y = 4H	19.6	20.7	20.1	21.1	21.5	25.1	26.2	25.6	26.6	27.0
Y = 6H	19.9	20.9	20.4	21.3	21.7	25.3	26.3	25.8	26.7	27.1
Y = 8H	20.1	20.9	20.6	21.4	21.8	25.4	26.2	25.8	26.7	27.1
Y = 12H	20.2	21.0	20.7	21.5	22.0	25.4	26.2	25.8	26.6	27.1
X = 8H Y = 4H	19.9	20.8	20.4	21.2	21.6	25.1	25.9	25.6	26.4	26.8
Y = 6H	20.3	21.0	20.8	21.5	22.0	25.4	26.1	25.8	26.5	27.0
Y = 8H	20.6	21.2	21.1	21.7	22.2	25.4	26.1	25.9	26.5	27.1
Y = 12H	20.8	21.4	21.4	21.9	22.4	25.5	26.0	26.0	26.5	27.1
X = 12H Y = 4H	19.9	20.7	20.4	21.2	21.6	25.1	25.8	25.5	26.3	26.8
Y = 6H	20.4	21.0	20.9	21.5	22.0	25.3	26.0	25.9	26.5	27.0
Y = 8H	20.7	21.2	21.2	21.8	22.3	25.4	26.0	26.0	26.5	27.0

	UGR Variations with Observer Position for Luminaire Spacings S			
S = 1.0H	+1.0	-1.0	+0.2	-0.3
S = 1.5H	+1.4	-1.5	+0.7	-0.9
S = 2.0H	+2.2	-1.9	+1.9	-2.0

Colour properties

Correlated Colour Temperature : 4000

Ra: CRI (Ra) 80

Efficiency

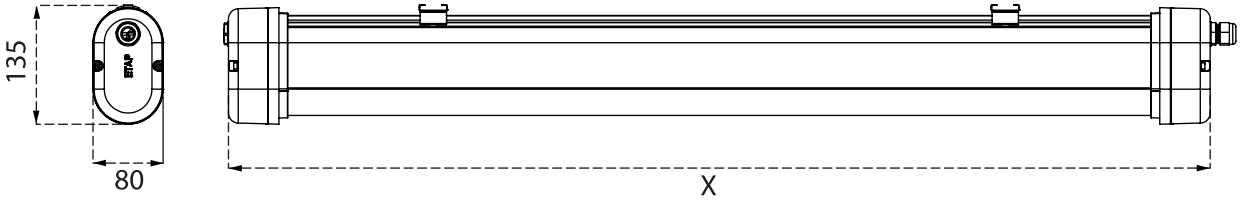
Utilisation Factors according to IES (%)

	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	105	103	101	98	96	95	94	93	91	86
2	94	89	86	88	84	82	84	81	79	74
3	84	78	73	79	74	71	76	72	69	65
4	75	69	64	71	66	62	69	64	61	57
5	68	61	56	65	59	55	63	58	54	51
6	62	55	50	59	53	49	58	52	48	45
7	57	50	45	55	48	44	53	47	43	41
8	53	45	40	50	44	40	49	43	39	37
9	49	41	37	47	40	36	46	40	36	34
10	45	38	33	44	37	33	42	37	33	31

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	55	47	52	46	53	46	51	45	44	38
0.80	67	58	62	56	63	56	60	55	54	48
1.00	75	66	70	63	71	64	67	62	61	55
1.25	85	76	77	72	79	73	75	70	69	63
1.50	91	83	82	77	85	79	79	75	74	68
2.00	98	91	88	83	91	86	85	81	79	74
2.50	104	98	92	88	96	91	89	85	84	79
3.00	109	103	95	92	100	96	92	89	87	83
4.00	113	108	98	95	103	99	94	92	90	85
5.00	117	112	100	98	106	103	96	94	92	88

Dimensional drawing



E2*/LED2*	620 mm
E2*/LED4*	1120 mm
E2*/LED6*	1620 mm