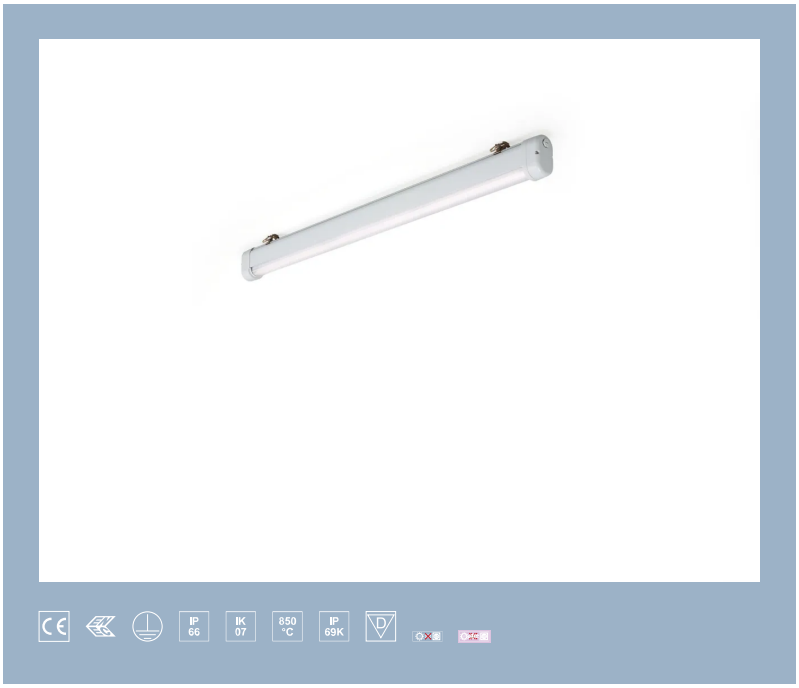
E21/LED6N090D



surface-mounted luminaire • linear

Application : Industry ? Food industry, Industry ? Corrosive environment

housing: lacquered aluminium

light source : LED • 4000 K

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

UGR classification : <=25

luminous flux: 8900 lm

luminous efficacy : 131 lm/W

LLMF: 97% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 1620 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 : 68 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

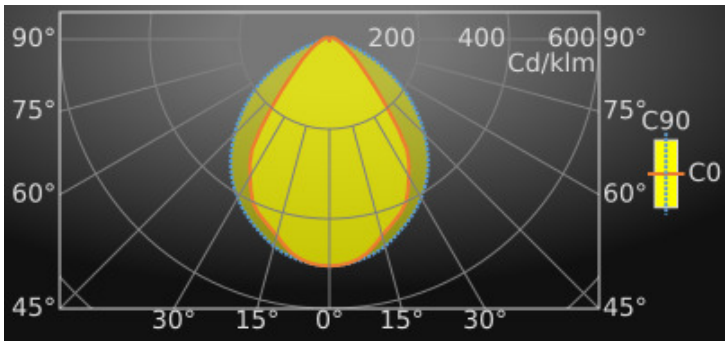
Luminance

luminous flux : 8900 lm

luminous efficacy : 131 lm/W

UGR classification =: <=25

luminous area : 0.1 m²



Average Luminances (Cd/m²) for 8900lm

Gamma	C0	C30	C45	C60	C90
45°	11405	15588	22342	28339	37895
50°	8222	10750	16033	24530	35362
55°	6328	7917	11355	19459	32524
60°	4971	6214	8387	14669	28618
65°	4173	4975	6531	10777	23637
70°	3446	4269	5392	8038	18425
75°	3019	3723	4529	6145	13770
80°	2826	3264	3990	4880	9642
85°	2705	3015	3564	3984	4678

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

ETAP tomorrow's light

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 8900lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	4494.0	4494.0	4494.0	90°	125.4	110.5	2.0
5°	4451.2	4439.4	4459.3	95°	105.9	81.1	0.1
10°	4305.9	4376.9	4379.4	100°	98.0	62.8	0.0
15°	4025.4	4170.3	4247.9	105°	85.7	47.3	0.1
20°	3812.3	3894.0	4057.2	110°	68.0	35.7	0.0
25°	3579.2	3691.2	3860.2	115°	52.8	27.0	0.0
30°	3136.5	3484.6	3633.3	120°	40.2	19.3	0.0
35°	2680.0	3032.5	3361.8	125°	28.7	12.7	0.0
40°	1794.2	2653.3	3034.3	130°	19.8	6.9	0.0
45°	1160.1	2066.7	2662.5	135°	13.0	0.4	0.0
50°	805.3	1410.4	2258.5	140°	6.6	0.0	0.0
55°	591.2	939.7	1853.6	145°	0.1	0.0	0.1
60°	438.5	645.2	1421.7	150°	0.0	0.0	0.1
65°	343.5	460.5	992.6	155°	0.0	0.0	0.2
70°	261.2	342.6	626.1	160°	0.0	0.0	0.3
75°	207.4	254.1	354.1	165°	0.2	0.0	0.2
80°	172.6	192.5	166.4	170°	1.0	0.7	0.4
85°	143.3	142.6	40.5	175°	2.3	2.1	1.7
90°	125.4	110.5	2.0	180°	2.2	2.2	2.2

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 8900lm (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	18.2	19.8	18.5	20.1	20.4	23.8	25.4	24.1	25.7	26.0
Y = 3H	18.6	20.0	18.9	20.3	20.7	24.7	26.2	25.1	26.5	26.8
Y = 4H	18.7	20.1	19.1	20.4	20.8	24.9	26.3	25.3	26.6	27.0
Y = 6H	18.9	20.2	19.3	20.5	20.9	25.0	26.3	25.4	26.7	27.0
Y = 8H	19.0	20.2	19.4	20.6	21.0	25.0	26.3	25.4	26.6	27.0
Y = 12H	19.1	20.3	19.5	20.7	21.0	25.0	26.2	25.4	26.6	26.9
X = 4H Y = 2H	18.8	20.2	19.2	20.5	20.8	23.7	25.1	24.1	25.4	25.7
Y = 3H	19.3	20.5	19.7	20.8	21.2	24.7	25.9	25.1	26.2	26.6
Y = 4H	19.5	20.6	20.0	21.0	21.4	25.0	26.1	25.5	26.5	26.9
Y = 6H	19.8	20.8	20.3	21.2	21.6	25.2	26.2	25.7	26.6	27.0
Y = 8H	20.0	20.9	20.5	21.3	21.7	25.3	26.1	25.7	26.6	27.0
Y = 12H	20.2	20.9	20.6	21.4	21.9	25.3	26.1	25.8	26.5	27.0
X = 8H Y = 4H	19.8	20.7	20.3	21.1	21.6	25.0	25.9	25.5	26.3	26.7
Y = 6H	20.2	21.0	20.7	21.4	21.9	25.3	26.0	25.8	26.5	26.9
Y = 8H	20.5	21.1	21.0	21.6	22.1	25.3	26.0	25.9	26.5	27.0
Y = 12H	20.7	21.3	21.3	21.8	22.3	25.4	25.9	25.9	26.4	27.0
X = 12H Y = 4H	19.8	20.6	20.3	21.1	21.6	25.0	25.8	25.5	26.2	26.7
Y = 6H	20.3	21.0	20.8	21.4	22.0	25.3	25.9	25.8	26.4	26.9
Y = 8H	20.6	21.2	21.1	21.7	22.2	25.4	25.9	25.9	26.4	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

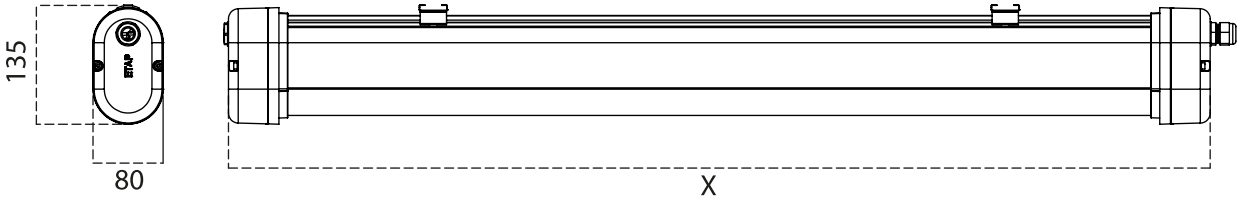
Utilisation Factors according to IES (%)

	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