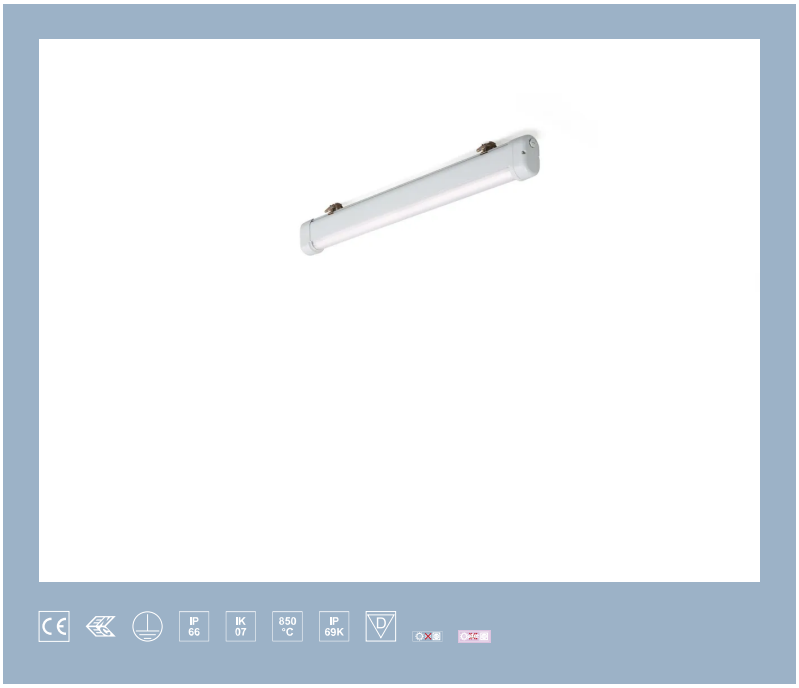
E22/LED4N045D



surface-mounted luminaire • linear

Application : Industry ? Food industry, Industry ? Corrosive environment

housing: lacquered aluminium

light source : LED • 4000 K

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

UGR classification : <=25

luminous flux: 4500 lm

luminous efficacy : 136 lm/W

LLMF: 98% @ 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 : 33 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

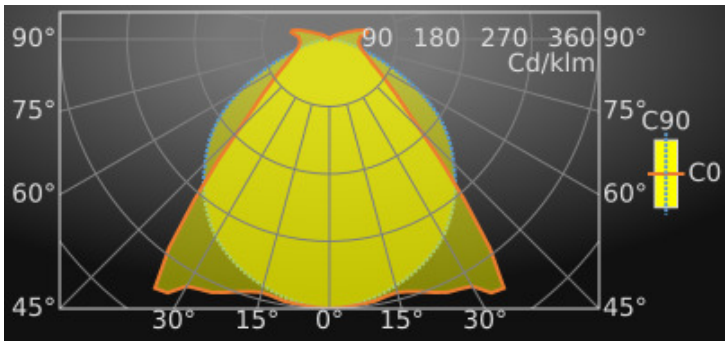
Luminance

luminous flux : 4500 lm

luminous efficacy : 136 lm/W

UGR classification =: <=25

luminous area : 0.07 m²



Average Luminances (Cd/m²) for 4500lm

Gamma	C0	C30	C45	C60	C90
45°	11386	14677	20204	23005	22701
50°	8181	9867	13620	19467	22167
55°	6381	7337	9523	14748	21123
60°	5235	5902	7158	10965	18825
65°	4691	4968	5733	8163	15402
70°	4295	4554	4941	6264	11820
75°	4255	4294	4466	5045	8762
80°	4486	4217	4266	4334	6171
85°	5014	4481	4234	3936	3078

Classifications

CIE: 528 / 803 / 898 / 942 / 1001

CIE FLUXCODE : 0.56 / 0.85 / 0.95 / 0.94 / 1.00

BZ: BZ4/0.8/BZ3/1/BZ4/1.25/BZ3/1.5/BZ4

CAE: CAE 3/5°/CAE 2/15°/CAE 1/35°/CAE 2/65°/CAE 3

DIN: A40 (Nach Arbeitsblatt 7 und 8)

DIN_U: Phi u = 0.94

DIN_SU: Phi su = 0.60

UTE: 0.94 D + 0.06 T

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	98	12

Luminous intensities in cd

Intensity for 4500lm

Gamma	C0	C45	C90	Gamma	C0	C45	C90
0°	1619.4	1619.4	1619.4	90°	181.2	97.7	1.1
5°	1609.7	1601.6	1604.8	95°	187.3	82.8	0.0
10°	1597.7	1597.1	1575.7	100°	232.7	79.7	0.0
15°	1575.8	1560.7	1535.3	105°	212.0	77.6	0.0
20°	1615.9	1520.1	1490.8	110°	129.0	76.6	0.0
25°	1679.0	1532.3	1435.0	115°	77.8	62.9	0.0
30°	1714.6	1563.6	1368.6	120°	50.5	37.9	0.0
35°	1827.4	1549.9	1277.7	125°	33.3	19.7	0.0
40°	1261.5	1601.9	1176.0	130°	21.4	6.3	0.0
45°	767.7	1238.8	1057.2	135°	12.7	0.7	0.0
50°	531.2	794.2	938.4	140°	1.3	0.0	0.0
55°	395.2	522.4	798.0	145°	0.0	0.0	0.0
60°	306.1	365.0	619.9	150°	0.0	0.0	0.0
65°	255.9	267.9	428.7	155°	0.0	0.0	0.0
70°	215.8	208.1	266.3	160°	0.0	0.0	0.0
75°	193.7	166.1	149.4	165°	0.0	0.0	0.0
80°	181.6	136.4	70.6	170°	0.1	0.0	0.2
85°	176.1	112.3	17.7	175°	0.0	0.0	0.0
90°	181.2	97.7	1.1	180°	0.0	0.0	0.0

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 4500lm (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	18.7	20.3	19.1	20.7	21.1	22.1	23.7	22.5	24.1	24.4
Y = 3H	19.3	20.8	19.7	21.2	21.5	22.9	24.3	23.3	24.7	25.1
Y = 4H	19.7	21.1	20.1	21.5	21.9	23.1	24.4	23.5	24.9	25.2
Y = 6H	20.2	21.4	20.6	21.9	22.3	23.1	24.4	23.6	24.8	25.3
Y = 8H	20.5	21.7	20.9	22.1	22.6	23.1	24.4	23.6	24.8	25.2
Y = 12H	20.8	22.0	21.3	22.4	22.9	23.1	24.3	23.6	24.7	25.2
X = 4H Y = 2H	19.1	20.5	19.5	20.9	21.3	22.0	23.4	22.4	23.8	24.2
Y = 3H	19.9	21.0	20.3	21.5	21.9	22.9	24.1	23.4	24.6	25.0
Y = 4H	20.4	21.4	20.9	21.9	22.4	23.2	24.3	23.7	24.8	25.2
Y = 6H	21.1	22.0	21.6	22.5	23.0	23.4	24.4	24.0	24.9	25.3
Y = 8H	21.5	22.3	22.0	22.8	23.3	23.5	24.3	24.0	24.8	25.3
Y = 12H	21.9	22.7	22.5	23.2	23.8	23.5	24.3	24.0	24.8	25.3
X = 8H Y = 4H	20.6	21.5	21.1	22.0	22.5	23.3	24.1	23.8	24.6	25.1
Y = 6H	21.5	22.2	22.0	22.7	23.3	23.6	24.3	24.1	24.8	25.4
Y = 8H	22.0	22.6	22.6	23.2	23.8	23.6	24.3	24.2	24.8	25.4
Y = 12H	22.7	23.2	23.2	23.8	24.4	23.7	24.2	24.3	24.8	25.4
X = 12H Y = 4H	20.6	21.4	21.1	21.9	22.4	23.3	24.0	23.8	24.6	25.1
Y = 6H	21.5	22.2	22.1	22.7	23.3	23.6	24.2	24.1	24.8	25.3
Y = 8H	22.1	22.7	22.7	23.3	23.9	23.7	24.3	24.3	24.8	25.4
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+0.6		-0.6			+0.4		-0.3		
S = 1.5H	+0.9		-0.9			+0.6		-0.8		
S = 2.0H	+1.5		-1.1			+1.5		-1.8		

Colour properties

Correlated Colour Temperature : 4000

Ra: CRI (Ra) 80

Efficiency

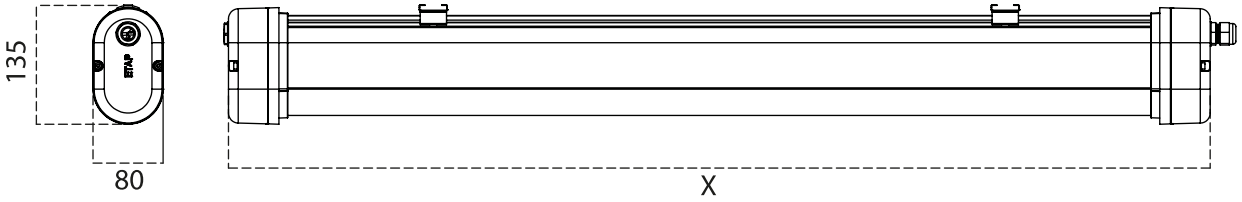
Utilisation Factors according to IES (%)

	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	103	100	98	95	93	91	90	88	87	80
2	91	86	82	84	80	77	80	76	74	68
3	80	74	70	74	70	66	71	67	64	59
4	72	65	60	67	61	57	64	59	55	51
5	65	57	52	60	54	50	58	53	49	45
6	59	51	45	55	49	44	53	47	43	40
7	53	46	40	50	44	39	48	42	38	35
8	49	41	36	46	39	35	44	38	34	32
9	45	37	32	42	36	31	41	35	31	29
10	41	34	29	39	33	29	38	32	28	26

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	50	41	48	40	47	40	45	39	38	32
0.80	62	53	58	51	58	51	55	49	48	41
1.00	70	61	65	58	65	58	62	56	55	48
1.25	80	71	73	67	74	67	70	64	63	56
1.50	86	78	78	72	79	73	74	70	68	61
2.00	94	87	84	79	86	80	80	76	74	67
2.50	101	94	89	84	91	86	84	81	78	72
3.00	105	99	92	88	95	91	88	85	82	76
4.00	110	105	95	92	99	95	90	88	85	79
5.00	114	109	98	95	102	98	93	90	88	82

Dimensional drawing



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