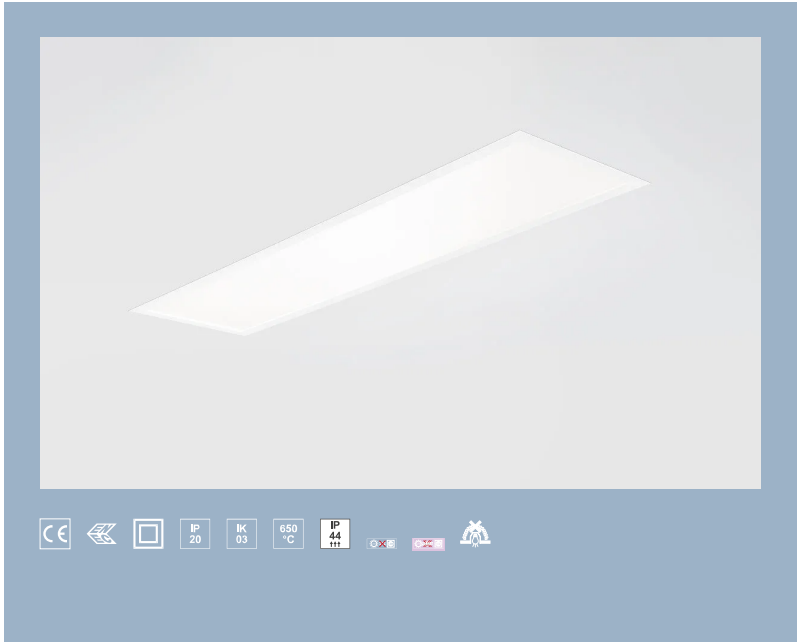


U23I1R1/NLDT1



recessed luminaire • linear

Application : Education ? Classrooms, Toilet, Technical space, Education ? Canteen, Offices ? Desk, Healthcare ? Corridor, Healthcare ? Patient rooms

housing: lacquered sheet steel

light source : LED • K

optics : diffuser • acrylic (PMMA) microprism with diffuser foil • wide-angle

UGR classification : <=19

luminous flux: 3300 lm

luminous efficacy : 120 lm/W

LLMF: 90% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 1195 mm x 295 mm x 25 mm

cut-out size : 1195 mm x 295 mm x 25 mm

shape : module 300

colour: RAL9016 - traffic white

type : individual luminaire

IP: IP20, IP44 from below

IK: IK03

ambient temperature: -20°C - 35°C •

Electrical properties

driver: DALI dimmable

power : 27.5 W

voltage : 220-240V

frequency : 50-60Hz AC/DC

photobiological safety : EN 62471: RISK GROUP 0 UNLIMITED

Luminance

luminous flux : 3300 lm

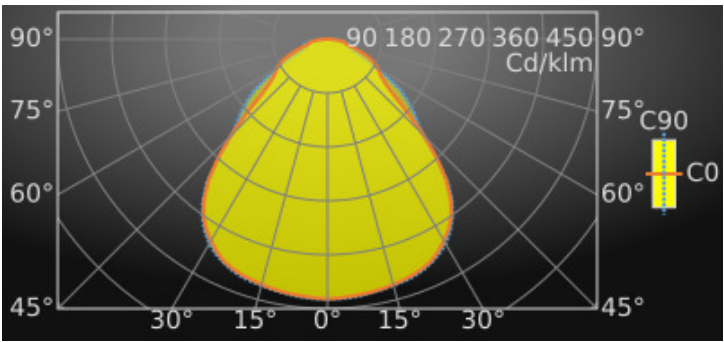
luminous efficacy : 120 lm/W

luminance @ 65° = : 3000 cd/m²

UGR classification =: <=19

luminous area : 0.28 m²

Average Luminances (Cd/m²) for 3300lm					
Gamma	C0	C30	C45	C60	C90
45°	3802	3874	3671	3638	3753
50°	2636	3567	3020	2401	3440
55°	2264	3224	2643	2070	3043
60°	2300	2419	2521	2148	2184
65°	2225	1676	2277	2063	1488
70°	1877	1439	2060	1672	1361
75°	1522	1956	1960	1360	2011
80°	1993	2258	1890	1888	2157
85°	1929	1991	1780	1766	2057



Classifications

CIE: 601 / 867 / 968 / 1000 / 1000

CIE FLUXCODE : 0.60 / 0.87 / 0.97 / 1.00 / 1.00

BZ: BZ3

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.62

UTE: 1.00 D + 0.00 T



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 // Made in Belgium

Lifetime Data (Tq=25.0°C)

Time(hrs)	LLMF(%)	Cx(%)
10000	97	2
20000	95	4
30000	93	6
40000	91	8
50000	90	9
60000	88	11
70000	86*	13
80000	84*	15
90000	82*	17
100000	81*	18

Luminous intensities in cd

Intensity for 3300lm

Gamma	C0	C45	C90
0°	1431.0	1431.0	1431.0
5°	1423.4	1428.9	1430.2
10°	1413.9	1416.5	1417.5
15°	1399.0	1402.8	1404.6
20°	1380.7	1390.8	1390.5
25°	1348.6	1347.5	1357.1
30°	1282.0	1288.4	1300.4
35°	1189.4	1193.0	1198.9
40°	1019.8	1022.6	1031.9
45°	750.5	724.6	740.8
50°	472.9	541.8	617.1
55°	362.5	423.1	487.2
60°	321.0	351.8	304.8
65°	262.5	268.6	175.5
70°	179.2	196.6	129.9
75°	110.0	141.6	145.3
80°	96.6	91.6	104.5
85°	46.9	43.3	50.1
90°	1.1	1.2	2.0

Colour properties

Ra: CRI (Ra) 80

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 3300lm (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	15.6	17.3	15.9	17.5	17.8	15.2	16.8	15.5	17.1	17.4
Y = 3H	16.5	18.0	16.8	18.3	18.6	16.0	17.5	16.3	17.8	18.1
Y = 4H	16.9	18.3	17.2	18.6	18.9	16.5	18.0	16.9	18.3	18.6
Y = 6H	17.2	18.6	17.6	18.9	19.2	17.1	18.4	17.4	18.7	19.1
Y = 8H	17.4	18.7	17.8	19.0	19.4	17.3	18.6	17.7	18.9	19.2
Y = 12H	17.5	18.8	17.9	19.1	19.5	17.4	18.7	17.8	19.0	19.3
X = 4H Y = 2H	15.9	17.3	16.2	17.6	17.9	15.6	17.0	15.9	17.3	17.6
Y = 3H	16.9	18.2	17.3	18.5	18.9	16.6	17.8	17.0	18.2	18.5
Y = 4H	17.5	18.6	17.9	19.0	19.4	17.2	18.3	17.7	18.7	19.1
Y = 6H	18.1	19.1	18.5	19.5	19.9	18.0	18.9	18.4	19.3	19.7
Y = 8H	18.3	19.2	18.8	19.6	20.1	18.2	19.1	18.7	19.5	20.0
Y = 12H	18.5	19.3	19.0	19.8	20.2	18.4	19.3	18.9	19.7	20.1
X = 8H Y = 4H	17.8	18.7	18.2	19.1	19.5	17.5	18.4	17.9	18.8	19.2
Y = 6H	18.6	19.3	19.0	19.8	20.2	18.3	19.1	18.8	19.5	20.0
Y = 8H	18.9	19.6	19.4	20.0	20.5	18.7	19.4	19.2	19.8	20.3
Y = 12H	19.2	19.8	19.7	20.2	20.8	19.0	19.6	19.5	20.1	20.6
X = 12H Y = 4H	17.8	18.6	18.2	19.0	19.5	17.5	18.4	18.0	18.8	19.2
Y = 6H	18.6	19.3	19.1	19.8	20.3	18.4	19.1	18.9	19.6	20.0
Y = 8H	19.0	19.6	19.5	20.1	20.6	18.9	19.4	19.3	19.9	20.4
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+0.3		-0.4			+0.3		-0.3		
S = 1.5H	+0.5		-0.7			+0.4		-0.8		
S = 2.0H	+1.0		-1.1			+0.8		-1.3		

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	102	100	99	97	95	95	93	92	86
2	93	88	85	88	84	81	84	81	79	74
3	83	77	72	78	74	70	76	72	68	65
4	74	67	62	71	65	61	68	64	60	57
5	67	60	55	64	58	54	62	57	53	50
6	61	54	48	58	52	48	57	51	47	44
7	56	48	43	54	47	43	52	46	42	40
8	51	44	39	49	43	38	48	42	38	36
9	48	40	35	46	39	35	45	39	35	33
10	44	37	32	43	36	32	42	36	32	30

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	54	45	51	44	51	44	49	43	43	37
0.80	65	57	61	54	62	55	59	53	53	47
1.00	74	65	68	62	70	63	66	60	60	53
1.25	83	75	76	70	78	72	74	69	68	62
1.50	90	81	81	76	84	78	79	74	73	67
2.00	98	90	87	82	91	85	84	80	79	74
2.50	104	97	92	87	96	91	89	85	84	79
3.00	108	103	95	91	100	96	92	89	88	83
4.00	113	108	98	95	103	100	94	92	90	86
5.00	116	112	100	97	106	103	97	95	93	89

Available accessories

U23R1H1 *Recessed mounting frame for plaster-board and wooden ceilings M300*

U23R2H3 *Surface-mounted frame, M300*



Dimensional drawing

