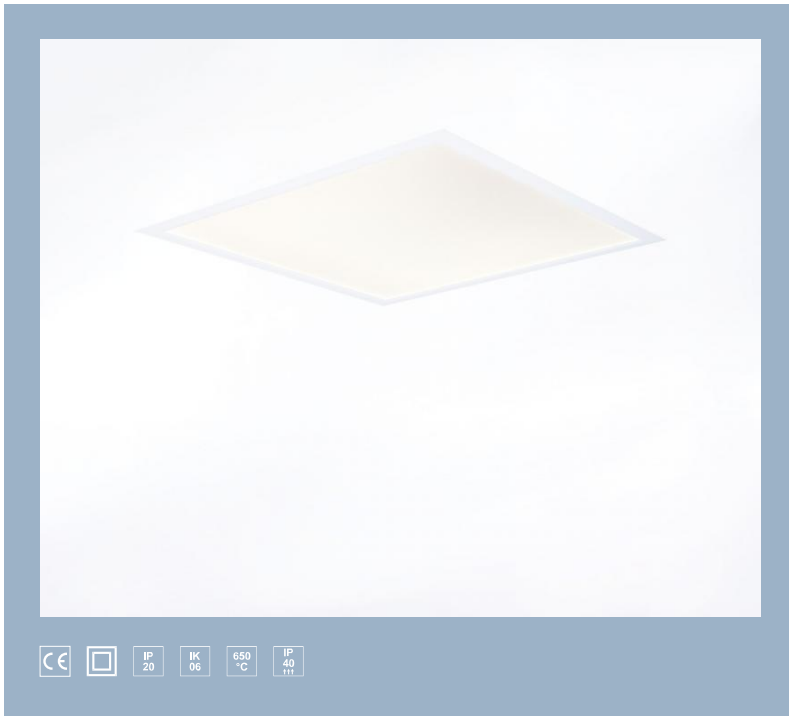


U23I8/LEDN35D



recessed luminaire • square

application : Office, Healthcare, Education, Horeca, Retail, Leisure

housing: lacquered sheet steel

light source : LED LP • 4000 K

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

UGR classification : <=19

luminous flux: 3400 lm

luminous efficacy : 117 lm/W

LLMF: 87% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

ceiling modulation : M625 square

colour: RAL9016 - traffic white (textured)

type : individual luminaire

IP: IP20, IP40 from below

Electrical properties

driver: DALI dimmable

power : 29 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 0
UNLIMITED



Luminance

luminous flux : 3400 lm

luminous efficacy : 117 lm/W

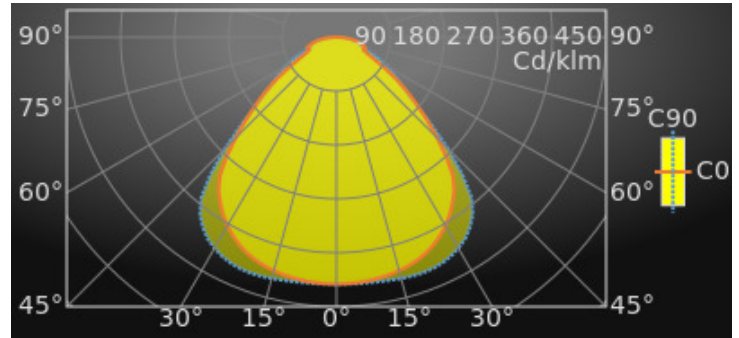
luminance @ 65° : 3000 cd/m²

UGR classification <=19

luminous area : 0.28 m²

Average Luminances (Cd/m²) for 3400lm

Gamma	C0	C30	C45	C60	C90
45°	4067	3918	4312	4670	4502
50°	3296	2845	3433	3851	3139
55°	2559	2399	2914	3129	2659
60°	1699	2060	2402	2047	2434
65°	1418	1592	1990	1508	1882
70°	1816	1420	1831	1858	1510
75°	1958	1842	1790	2022	1871
80°	2141	1954	1977	2033	1807
85°	2116	2240	2226	2013	1960



Classifications

CIE: 594 / 877 / 968 / 1000 / 1000

CIE FLUXCODE : 0.59 / 0.88 / 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



Luminous intensities in cd

Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	97	n/a
20	95	n/a
30	92	n/a
40	89	n/a
50	87	n/a
60	85	n/a

Intensity for 3400lm

Gamma	C0	C45	C90
0°	1401.9	1401.9	1401.9
5°	1398.6	1401.2	1403.3
10°	1389.2	1398.9	1408.3
15°	1373.2	1394.7	1417.9
20°	1346.4	1383.0	1425.2
25°	1301.7	1354.9	1415.7
30°	1236.0	1305.9	1383.7
35°	1148.9	1230.6	1319.8
40°	1027.9	1106.3	1192.5
45°	807.8	856.5	894.3
50°	595.1	619.9	566.7
55°	412.2	469.4	428.3
60°	238.6	337.4	341.8
65°	168.3	236.2	223.4
70°	174.5	175.9	145.1
75°	142.3	130.1	136.0
80°	104.4	96.4	88.1
85°	51.8	54.5	48.0
90°	0.0	0.0	0.0

UGR classification

Corrected Glare Ratings for a Total Lamp Flux of 3400lm (S = 0.25H)

Ceiling Walls Floor	Room Reflection Factors (%)									
	70	70	50	50	30	70	70	50	50	30
	50	30	50	30	30	50	30	50	30	30
	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise				
X = 2H Y = 2H	15.0	16.7	15.3	17.0	17.2	15.9	17.6	16.2	17.9	18.1
Y = 3H	15.8	17.3	16.1	17.6	17.9	16.5	18.1	16.9	18.4	18.7
Y = 4H	16.3	17.7	16.6	18.0	18.3	16.9	18.3	17.2	18.6	18.9
Y = 6H	16.8	18.1	17.2	18.5	18.8	17.2	18.6	17.6	18.9	19.2
Y = 8H	17.0	18.3	17.4	18.7	19.0	17.4	18.7	17.7	19.0	19.3
Y = 12H	17.2	18.4	17.6	18.8	19.1	17.5	18.7	17.9	19.1	19.4
X = 4H Y = 2H	15.3	16.8	15.7	17.1	17.4	16.1	17.5	16.4	17.8	18.1
Y = 3H	16.3	17.5	16.7	17.9	18.2	17.0	18.2	17.4	18.5	18.9
Y = 4H	16.9	18.0	17.3	18.4	18.8	17.5	18.6	17.9	19.0	19.3
Y = 6H	17.7	18.6	18.1	19.0	19.4	18.0	19.0	18.5	19.4	19.8
Y = 8H	18.0	18.9	18.4	19.3	19.7	18.3	19.2	18.7	19.6	20.0
Y = 12H	18.2	19.1	18.7	19.5	19.9	18.4	19.3	18.9	19.7	20.1
X = 8H Y = 4H	17.2	18.1	17.7	18.5	18.9	17.7	18.6	18.2	19.0	19.5
Y = 6H	18.1	18.9	18.6	19.3	19.8	18.5	19.2	18.9	19.7	20.1
Y = 8H	18.6	19.3	19.1	19.7	20.2	18.8	19.5	19.3	19.9	20.4
Y = 12H	19.0	19.5	19.5	20.0	20.6	19.1	19.7	19.6	20.2	20.7
X = 12H Y = 4H	17.3	18.1	17.7	18.5	18.9	17.8	18.6	18.2	19.0	19.5
Y = 6H	18.2	18.9	18.7	19.4	19.8	18.5	19.2	19.0	19.7	20.2
Y = 8H	18.7	19.3	19.2	19.8	20.3	18.9	19.5	19.4	20.0	20.5
UGR Variations with Observer Position for Luminaire Spacings S										
S = 1.0H	+0.3		-0.3		+0.4		-0.5			
S = 1.5H	+0.5		-0.8		+0.7		-0.8			
S = 2.0H	+1.2		-1.1		+1.5		-1.3			



Colour properties

Correlated Colour Temperature : 4000

Ra: 80

Efficiency

Utilisation Factors according to IES (%)

	Room Reflection Factors (%)									
	80	80	80	50	50	50	30	30	30	0
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	75
3	83	77	72	78	74	70	76	72	69	65
4	74	67	62	71	65	61	68	64	60	57
5	67	60	55	64	58	53	62	57	53	50
6	61	53	48	58	52	47	57	51	47	44
7	56	48	43	53	47	42	52	46	42	40
8	51	44	38	49	43	38	48	42	38	36
9	47	40	35	45	39	34	44	38	34	32
10	44	36	32	42	36	31	41	35	31	29

Utilisation Factors according to LiTG (%)

	Room Reflection Factors (%)									
	80	80	80	50	50	50	50	50	30	0
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	53	45	50	43	51	44	49	43	42	36
0.80	65	56	61	54	62	55	59	53	52	46
1.00	74	65	68	61	70	63	66	60	60	53
1.25	83	75	76	70	78	72	74	69	68	62
1.50	90	82	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

Dimensional drawing

