

U7C-M824-35-840-030S



recessed luminaire • square

Application : Education ? Classrooms, Offices ? Desk

housing: lacquered sheet steel

light source : LED • 4000 K

optics : LED+LENS™ • polycarbonate (PC) lens and cup • very wide-angle

UGR classification : <=19

luminous flux: 3000 lm

luminous efficacy : 167 lm/W

LLMF: 96% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 621 mm x 621 mm x 50 mm

cut-out size : 621 mm x 621 mm x 50 mm

shape : module 625 square

colour: RAL9003 - white

type : individual luminaire

IP: IP20

Electrical properties

driver: not dimmable

power : 18 W

voltage : 220-240V

frequency : 50/60Hz AC

photobiological safety : EN 62471: RISK GROUP 1
UNLIMITED

Luminance

luminous flux : 3000 lm

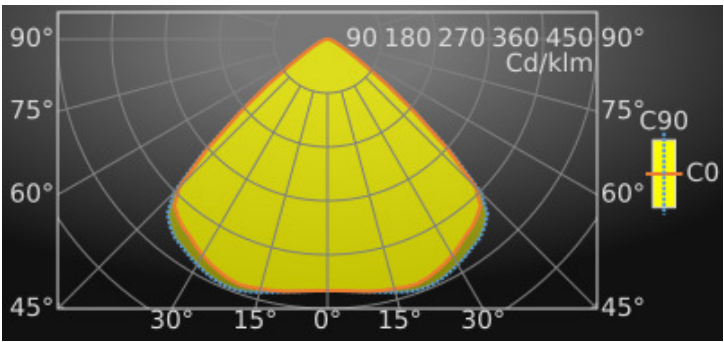
luminous efficacy : 167 lm/W

luminance @ 65° = : 1500 cd/m²

UGR classification =: <=19

luminous area : 0.12 m²

Gamma	Average Luminances (Cd/m²) for 3000lm				
	C0	C30	C45	C60	C90
45°	12606	11861	11620	11667	13072
50°	7490	9783	11063	9746	7627
55°	3504	5694	6636	5741	3571
60°	1846	2268	2482	2288	1901
65°	1226	1313	1354	1333	1269
70°	921	917	928	933	959
75°	748	726	711	748	790
80°	589	585	575	611	620
85°	207	235	242	244	383



Classifications

CIE: 644 / 966 / 995 / 1000 / 1000

CIE FLUXCODE : 0.64 / 0.97 / 1.00 / 1.00 / 1.00

BZ: BZ2

CAE: Symmetrical

DIN: A50 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.68

UTE: 1.00 C + 0.00 T



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Lifetime Data (Tq=25.0°C)

Time(hrs)	LLMF(%)	Cx(%)
10000	99	1
20000	98	2
30000	98	3
40000	97	4
50000	96	5
60000	96	6
70000	95*	7
80000	94*	8
90000	94*	9
100000	93*	9

Luminous intensities in cd

Intensity for 3000lm

Gamma	C0	C45	C90
0°	1259.0	1259.0	1259.0
5°	1265.9	1265.3	1266.6
10°	1282.3	1290.1	1284.8
15°	1294.1	1307.0	1313.0
20°	1305.7	1306.4	1336.8
25°	1283.8	1308.0	1331.4
30°	1249.9	1233.1	1304.1
35°	1203.8	1165.7	1268.8
40°	1163.3	1047.4	1224.6
45°	1048.3	966.3	1087.0
50°	566.2	836.3	576.5
55°	236.3	447.6	240.9
60°	108.6	145.9	111.8
65°	60.9	67.3	63.1
70°	37.0	37.3	38.6
75°	22.8	21.6	24.0
80°	12.0	11.7	12.7
85°	2.1	2.5	3.9
90°	0.0	0.0	0.0

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 3000lm (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	19.9	18.5	20.1	20.4	18.3	19.9	18.6	20.2	20.4
Y = 3H	18.1	19.6	18.5	19.9	20.2	18.1	19.6	18.5	19.9	20.2
Y = 4H	18.1	19.4	18.4	19.7	20.0	18.1	19.5	18.4	19.8	20.1
Y = 6H	18.0	19.3	18.4	19.6	19.9	18.0	19.3	18.4	19.6	20.0
Y = 8H	18.0	19.2	18.3	19.5	19.8	18.0	19.2	18.4	19.6	19.9
Y = 12H	17.9	19.1	18.3	19.4	19.8	18.0	19.1	18.4	19.5	19.8
X = 4H Y = 2H	18.1	19.5	18.5	19.8	20.1	18.2	19.6	18.5	19.9	20.2
Y = 3H	18.1	19.2	18.5	19.6	19.9	18.1	19.3	18.5	19.6	20.0
Y = 4H	18.0	19.1	18.4	19.4	19.8	18.1	19.1	18.5	19.5	19.8
Y = 6H	18.0	18.9	18.4	19.3	19.7	18.0	18.9	18.5	19.3	19.7
Y = 8H	18.0	18.8	18.4	19.2	19.6	18.0	18.8	18.5	19.2	19.7
Y = 12H	17.9	18.7	18.4	19.1	19.6	18.0	18.7	18.4	19.2	19.6
X = 8H Y = 4H	18.0	18.8	18.4	19.2	19.6	18.0	18.8	18.4	19.2	19.6
Y = 6H	17.9	18.6	18.4	19.1	19.5	18.0	18.7	18.4	19.1	19.6
Y = 8H	17.9	18.5	18.4	19.0	19.5	18.0	18.6	18.4	19.0	19.5
Y = 12H	17.9	18.4	18.4	18.9	19.4	17.9	18.5	18.4	18.9	19.5
X = 12H Y = 4H	17.9	18.7	18.4	19.1	19.5	18.0	18.7	18.4	19.1	19.6
Y = 6H	17.9	18.5	18.4	19.0	19.4	18.0	18.6	18.4	19.0	19.5
Y = 8H	17.9	18.4	18.4	18.9	19.4	17.9	18.5	18.4	18.9	19.5
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+1.7		-3.7			+1.6		-3.7		
S = 1.5H	+2.9		-7.6			+2.9		-7.4		
S = 2.0H	+4.6		-8.8			+4.8		-8.6		

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	108	105	104	101	100	98	97	96	95	90
2	97	93	89	91	88	86	88	86	84	79
3	87	81	77	82	78	75	80	76	73	70
4	78	72	67	75	69	66	72	68	65	61
5	71	64	59	68	62	58	66	61	57	54
6	64	57	52	62	56	51	60	55	51	48
7	59	52	46	57	50	46	55	50	46	43
8	54	47	42	52	46	41	51	45	41	39
9	50	42	38	48	42	37	47	41	37	35
10	46	39	34	44	38	34	43	38	34	32

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	56	47	53	46	54	47	52	45	45	39
0.80	69	60	65	58	66	59	63	57	56	51
1.00	78	70	72	66	74	67	70	65	64	59
1.25	88	80	80	75	83	77	78	74	73	68
1.50	94	87	85	80	88	83	83	79	78	73
2.00	101	95	91	86	95	90	88	85	83	79
2.50	107	101	95	91	99	95	92	89	88	84
3.00	112	107	98	95	103	100	95	93	91	87
4.00	116	111	100	97	106	103	97	95	93	90
5.00	119	115	102	100	108	106	99	97	96	92

Dimensional drawing

