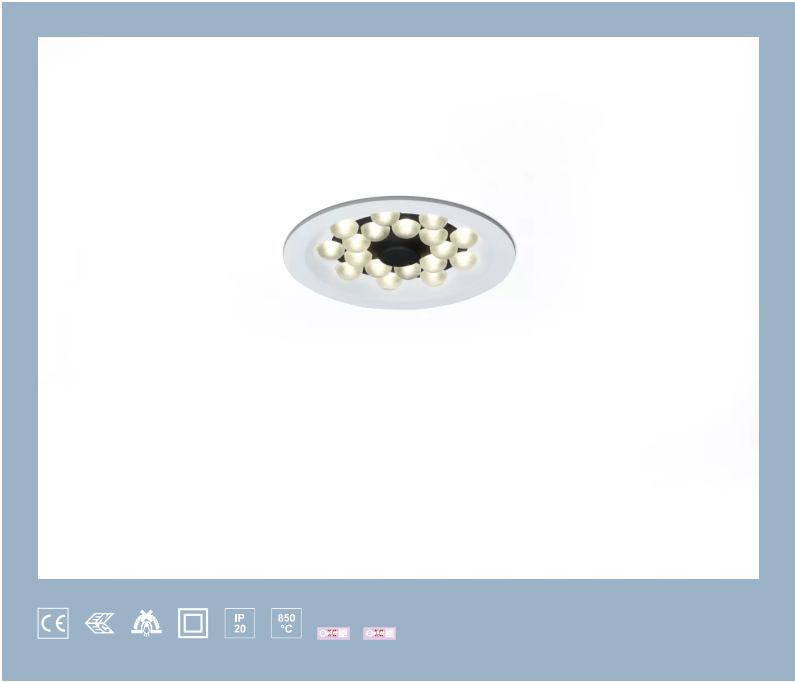


D42R1/LEDN1820D



recessed luminaire • round

Application : General office area's, General education area's

housing: lacquered aluminium

light source : LED • 4000 K

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

UGR classification : <=22

luminous flux: 2250 lm

luminous efficacy : 125 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 200 mm x 70 mm

cut-out size : 180 mm x 70 mm

colour: RAL9003 - signal white

trim: flat trim

type : individual luminaire

IP: IP20

Electrical properties

driver: DALI dimmable

power : 18 W

voltage : 220-240V

frequency : 50-60Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

current : 12 A

Luminance

luminous flux : 2250 lm

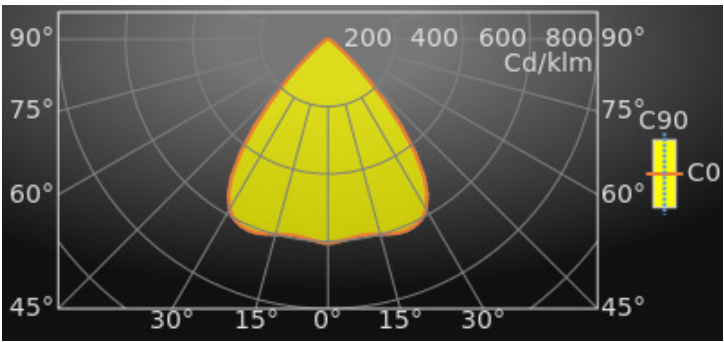
luminous efficacy : 125 lm/W

luminance @ 65° = : 3000 cd/m²

UGR classification =: <=22

luminous area : 0.02 m²

Gamma	Average Luminances (Cd/m²) for 2250lm				
	C0	C30	C45	C60	C90
45°	27486	27486	27486	27486	27486
50°	11819	11819	11819	11819	11819
55°	5932	5932	5932	5932	5932
60°	3730	3730	3730	3730	3730
65°	2842	2842	2842	2842	2842
70°	2411	2411	2411	2411	2411
75°	2095	2095	2095	2095	2095
80°	1801	1801	1801	1801	1801
85°	1418	1418	1418	1418	1418



Classifications

CIE: 835 / 982 / 997 / 1000 / 1000

CIE FLUXCODE : 0.84 / 0.98 / 1.00 / 1.00 / 1.00

BZ: BZ1

CAE: Symmetrical

DIN: A60 (Nach Arbeitsblatt 7)

DIN_U: Phi u = 1.00

DIN_SU: Phi su = 0.76

UTE: 1.00 B + 0.00 T



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Lifetime Data (Tq=25.0°C)

Time(khrs)	LLMF(%)	Cx(%)
10	100	2
20	99	4
30	99	6
40	99	8
50	98	10
60	98	12

Luminous intensities in cd

Intensity for 2250lm

Gamma	C0	C45	C90
0°	1364.9	1364.9	1364.9
5°	1343.6	1343.6	1343.6
10°	1329.4	1329.4	1329.4
15°	1347.8	1347.8	1347.8
20°	1377.3	1377.3	1377.3
25°	1375.2	1375.2	1375.2
30°	1310.8	1310.8	1310.8
35°	1119.0	1119.0	1119.0
40°	768.2	768.2	768.2
45°	390.8	390.8	390.8
50°	152.7	152.7	152.7
55°	68.4	68.4	68.4
60°	37.5	37.5	37.5
65°	24.2	24.2	24.2
70°	16.6	16.6	16.6
75°	10.9	10.9	10.9
80°	6.3	6.3	6.3
85°	2.5	2.5	2.5
90°	0.7	0.7	0.7

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 2250lm (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	20.4	21.9	20.7	22.1	22.4	20.4	21.9	20.7	22.1	22.4
Y = 3H	20.3	21.6	20.6	21.9	22.1	20.3	21.6	20.6	21.9	22.1
Y = 4H	20.2	21.4	20.5	21.7	22.0	20.2	21.4	20.5	21.7	22.0
Y = 6H	20.1	21.3	20.5	21.6	21.9	20.1	21.3	20.5	21.6	21.9
Y = 8H	20.1	21.2	20.5	21.5	21.8	20.1	21.2	20.5	21.5	21.8
Y = 12H	20.1	21.1	20.5	21.4	21.8	20.1	21.1	20.5	21.4	21.8
X = 4H Y = 2H	20.2	21.4	20.5	21.7	22.0	20.2	21.4	20.5	21.7	22.0
Y = 3H	20.1	21.1	20.5	21.5	21.8	20.1	21.1	20.5	21.5	21.8
Y = 4H	20.1	21.0	20.5	21.3	21.7	20.1	21.0	20.5	21.3	21.7
Y = 6H	20.0	20.8	20.5	21.2	21.6	20.0	20.8	20.5	21.2	21.6
Y = 8H	20.0	20.7	20.4	21.1	21.6	20.0	20.7	20.4	21.1	21.6
Y = 12H	20.0	20.6	20.4	21.1	21.5	20.0	20.6	20.4	21.1	21.5
X = 8H Y = 4H	20.0	20.7	20.4	21.1	21.5	20.0	20.7	20.4	21.1	21.5
Y = 6H	20.0	20.6	20.4	21.0	21.5	20.0	20.6	20.4	21.0	21.5
Y = 8H	19.9	20.5	20.4	20.9	21.4	19.9	20.5	20.4	20.9	21.4
Y = 12H	19.9	20.4	20.4	20.9	21.4	19.9	20.4	20.4	20.9	21.4
X = 12H Y = 4H	19.9	20.6	20.4	21.0	21.5	19.9	20.6	20.4	21.0	21.5
Y = 6H	19.9	20.5	20.4	20.9	21.4	19.9	20.5	20.4	20.9	21.4
Y = 8H	19.9	20.4	20.4	20.9	21.4	19.9	20.4	20.4	20.9	21.4
	UGR Variations with Observer Position for Luminaire Spacings S									
S = 1.0H	+2.8		-6.6			+2.8		-6.6		
S = 1.5H	+5.1		-8.2			+5.1		-8.2		
S = 2.0H	+7.1		-8.9			+7.1		-8.9		

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	109	107	106	103	101	100	99	98	97	92
2	100	96	94	95	92	90	92	89	88	83
3	91	87	83	87	83	81	85	81	79	75
4	84	78	74	80	76	73	78	74	72	68
5	77	71	67	74	69	66	72	68	65	62
6	71	65	60	69	63	60	67	62	59	56
7	66	59	55	64	58	54	62	57	54	52
8	61	55	50	59	54	50	58	53	49	47
9	57	50	46	55	50	46	54	49	45	43
10	53	47	42	52	46	42	51	45	42	40

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	65	58	62	56	63	57	61	56	55	50
0.80	77	70	72	67	74	68	71	66	66	61
1.00	85	77	79	73	81	75	77	72	72	67
1.25	94	88	86	82	90	84	84	81	80	76
1.50	99	93	90	86	94	89	88	85	84	80
2.00	106	100	95	91	99	95	92	90	89	85
2.50	111	106	98	95	103	99	95	93	92	88
3.00	115	110	100	98	106	103	98	96	95	91
4.00	118	114	102	100	108	106	99	98	96	93
5.00	121	117	103	102	110	108	100	99	98	94

Dimensional drawing

