

D1C-R300-13-830-015D



recessed luminaire • round

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

housing: injection-moulded aluminium

light source : LED • 3000 K

optics : reflector • aluminium, specular with diamond facets • medium wide-angle

UGR classification : <=16

luminous flux: 1450 lm

luminous efficacy : 145 lm/W

LLMF: 96% @ 50khrs (Tq=25°C)

Product information

Mechanical properties

dimensions : 220 mm x 120 mm

cut-out size : 205 mm x 120 mm

shape : individual round

colour: RAL9003 - white

trim: wafer trim

type : individual luminaire

IP: IP20

Electrical properties

driver: DALI dimmable

power : 10 W

voltage : 230-240V

frequency : 50Hz AC

photobiological safety : EN 62471: RISK GROUP 1 UNLIMITED

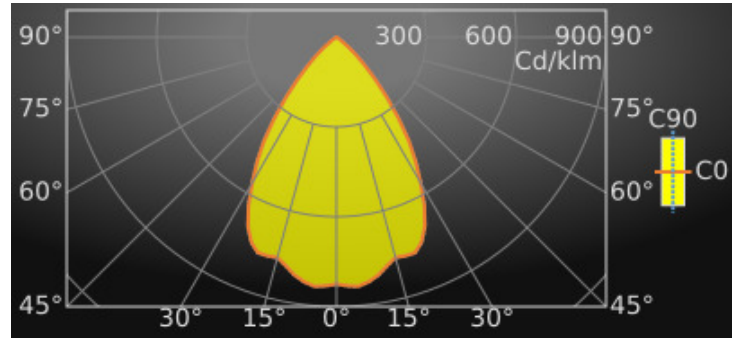
Luminance

luminous flux : 1450 lm

luminous efficacy : 145 lm/W

UGR classification =: <=16

luminous area : 0.02 m²



Average Luminances (Cd/m²) for 1450lm

Gamma	C0	C30	C45	C60	C90
45°	11994	11994	11994	11994	11994
50°	5236	5236	5236	5236	5236
55°	1579	1579	1579	1579	1579
60°	3	3	3	3	3
65°	0	0	0	0	0
70°	0	0	0	0	0
75°	0	0	0	0	0
80°	0	0	0	0	0
85°	0	0	0	0	0

Classifications

CIE: 894 / 1000 / 1000 / 1000 / 1000

CIE FLUXCODE : 0.89 / 1.00 / 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 = 0.81

UTE: 1.00 A + 0.00 T

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Lifetime Data (Tq=25.0°C)

Time(hrs)	LLMF(%)	Cx(%)
10000	99	2
20000	98	4
30000	97	6
40000	97	8
50000	96	9
60000	95	11
70000	95*	13
80000	94*	15
90000	93*	17
100000	93*	18

UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 1450lm (S = 0.25H)

	Room Reflection Factors (%)														
	Ceiling	Walls	Floor	70	70	50	50	30	70	70	50	50	30		
	70	70	50	50	30	70	70	50	50	30	70	70	50	50	30
	50	30	50	30	30	50	30	50	30	30	50	30	50	30	30
	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Room Dimensions	Viewed Crosswise					Viewed Endwise									
X = 2H Y = 2H	16.8	18.2	17.1	18.5	18.7	16.8	18.2	17.1	18.5	18.7					
Y = 3H	16.7	17.9	17.0	18.2	18.4	16.7	17.9	17.0	18.2	18.4					
Y = 4H	16.6	17.7	16.9	18.0	18.3	16.6	17.7	16.9	18.0	18.3					
Y = 6H	16.5	17.6	16.9	17.9	18.2	16.5	17.6	16.9	17.9	18.2					
Y = 8H	16.5	17.5	16.9	17.8	18.1	16.5	17.5	16.9	17.8	18.1					
Y = 12H	16.5	17.4	16.8	17.7	18.1	16.5	17.4	16.8	17.7	18.1					
X = 4H Y = 2H	16.6	17.7	16.9	18.0	18.3	16.6	17.7	16.9	18.0	18.3					
Y = 3H	16.5	17.4	16.8	17.7	18.1	16.5	17.4	16.8	17.7	18.1					
Y = 4H	16.4	17.2	16.8	17.6	17.9	16.4	17.2	16.8	17.6	17.9					
Y = 6H	16.3	17.0	16.7	17.4	17.8	16.3	17.0	16.7	17.4	17.8					
Y = 8H	16.3	16.9	16.7	17.3	17.8	16.3	16.9	16.7	17.3	17.8					
Y = 12H	16.2	16.8	16.7	17.3	17.7	16.2	16.8	16.7	17.3	17.7					
X = 8H Y = 4H	16.3	16.9	16.7	17.3	17.8	16.3	16.9	16.7	17.3	17.8					
Y = 6H	16.2	16.8	16.7	17.2	17.7	16.2	16.8	16.7	17.2	17.7					
Y = 8H	16.2	16.7	16.6	17.1	17.6	16.2	16.7	16.6	17.1	17.6					
Y = 12H	16.1	16.6	16.6	17.0	17.6	16.1	16.6	16.6	17.0	17.6					
X = 12H Y = 4H	16.2	16.8	16.7	17.3	17.7	16.2	16.8	16.7	17.3	17.7					
Y = 6H	16.2	16.7	16.6	17.1	17.6	16.2	16.7	16.6	17.1	17.6					
Y = 8H	16.1	16.6	16.6	17.0	17.6	16.1	16.6	16.6	17.0	17.6					
UGR Variations with Observer Position for Luminaire Spacings S															
S = 1.0H	+3.4		-13.0		+3.4		-13.0								
S = 1.5H	+6.1		+0.0		+6.1		+0.0								
S = 2.0H	+8.1		+0.0		+8.1		+0.0								

Luminous intensities in cd

Intensity for 1450lm

Gamma	C0	C45	C90
0°	1195.4	1195.4	1195.4
5°	1211.3	1211.3	1211.3
10°	1169.3	1169.3	1169.3
15°	1104.6	1104.6	1104.6
20°	1111.2	1111.2	1111.2
25°	1013.2	1013.2	1013.2
30°	815.0	815.0	815.0
35°	610.2	610.2	610.2
40°	377.2	377.2	377.2
45°	199.4	199.4	199.4
50°	79.1	79.1	79.1
55°	21.3	21.3	21.3
60°	0.0	0.0	0.0
65°	0.0	0.0	0.0
70°	0.0	0.0	0.0
75°	0.0	0.0	0.0
80°	0.0	0.0	0.0
85°	0.0	0.0	0.0
90°	0.0	0.0	0.0

Colour properties

Correlated Colour Temperature : 3000

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	110	109	107	104	103	102	100	99	98	93
2	102	99	96	97	94	92	94	92	90	85
3	94	90	87	90	87	84	87	85	82	78
4	87	82	79	84	80	77	82	78	76	72
5	81	75	71	78	73	70	76	72	69	66
6	75	69	65	73	68	64	71	67	64	61
7	70	64	60	68	63	59	67	62	59	57
8	66	59	55	64	59	55	63	58	55	53
9	61	55	51	60	55	51	59	54	51	49
10	58	52	48	56	51	47	55	51	47	45

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	72	65	68	63	70	64	67	63	62	58
0.80	82	75	77	72	79	74	76	72	71	67
1.00	89	83	83	78	86	80	81	78	77	73
1.25	99	92	90	87	94	89	88	85	85	81
1.50	103	97	93	90	97	93	91	89	88	84
2.00	109	104	97	95	102	99	95	93	92	89
2.50	113	109	100	98	105	102	97	96	94	91
3.00	117	113	102	100	108	106	100	98	97	94
4.00	119	116	103	102	110	107	100	99	98	95
5.00	122	119	104	103	112	110	102	101	99	96

Dimensional drawing

